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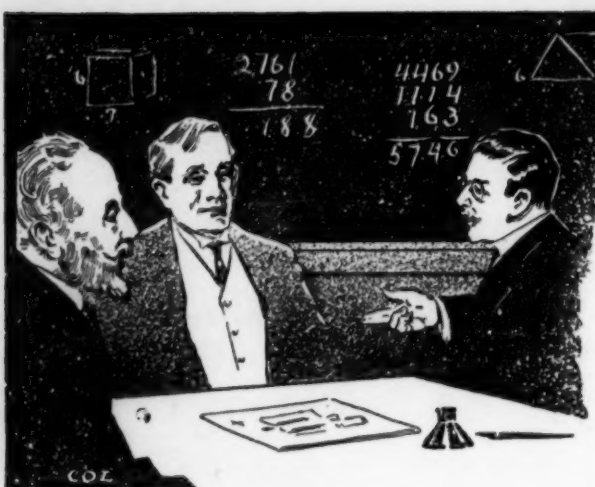
JULY, 1916

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HIGH ALTITUDES IN CONJUNCTION.

K.W.T.



The New School Board Member

G. E. Brown, Wenatchee, Wash.

Most newly elected school board members are sincere. They have a very deep sense of public duty. They have agreed in their hearts to devote much time and honest work to the good of the schools and the education of the children. They are not lacking in energy, tho the energy is often misdirected. Plenty of gas in the carburetor is essential in running an automobile, but unless one who knows how is driving the car, power and speed are more dangerous than useful.

A new school board member should understand that by acting hastily, he may do much serious damage. He should know that every school is a large financial problem. Towns of 15,000 inhabitants spend in the neighborhood of \$100,000 every year for school purposes. Far more important than that, every school is dealing with plastic children—with minds, hearts, and immortal souls. If a new school building is bungled, it can be torn down or remodeled; a defective piece of machinery can be replaced, but a child is never ten years old but once. What he learns each year can never be changed, and will influence his whole after life. A mistake in child training is irrevocable.

By forcing a change in the management anywhere until he is sure of his ground, the new member may do serious damage to the finances of the school district, and unmeasurable harm to helpless children. In a city where I once worked, the manager of a million dollar corporation was elected to the school board. At his first meeting, the other members, impressed by his business prestige, were inclined to defer to him. The first time his opinion was asked for, even tho it was in an unimportant matter, he replied, "Gentlemen, this is too big a subject for me to pretend to offer advice. I came to-night to learn. Give me a few months at least, before expecting me to carry much of the burden."

The most important first duty of a new school board member is to learn to keep quiet on school matters before the public, until he has had time to learn something about the school from first hand inspection and from conference with those who are in a position to know. A new member should never talk about the schools. An old member, seeing the dangers of unwise statements, seldom talks enough. No school board member should ever express an opinion in an individual case to a complaining parent, pupil, or teacher, until he has heard the "other side." It is not only unjust, but dangerous to the school system. I know a school board president who always makes the following statement to the old school board members whenever a new member takes office:

"Gentlemen, I want to thank you at this time, for one thing in particular that I have noticed during the past year. None of you has ever said more to a parent or pupil who came to you with a complaint regarding a teacher than,

'When you have taken this matter up with the superintendent and failed to get it adjusted, we shall certainly look into it carefully.' That has been of great assistance to the teachers and the superintendent."

The second duty of a new member is to learn what he can about his work. He should get acquainted with his schools. He should visit them and talk with the superintendent, principals and teachers. A new member sometimes hesitates to do this, fearing that he is in the way. Instead, he will be gladly received and shown every courtesy. He should examine the reports, and compare them with reports of former years, and of other cities where similar conditions exist. If the reports are too technical and he cannot understand them, he should never be ashamed to confess his ignorance but should have them carefully explained to him, and insist that they be simplified until anyone with average intelligence can understand them. There are three other important sources of information regarding his duties that he should not neglect. He should make a careful study of "How to Become a Good School Board Member" and subscribe for and read regularly a good school board paper. Whenever business or pleasure takes him to another city, he should spend some time visiting the schools, looking over the buildings and talking with the superintendent, principals, teachers, and school board members. He need not feel embarrassed in doing this, because he is sure to receive a cordial welcome.

Due to the indefinite laws on the powers and functions of school boards, many unwise practices have become common in the United States, so that a list of the duties of a school board contains about as many "don'ts" as it contains positive injunctions. In general the school board should be a legislative body. It should delegate its executive powers to experts who are paid for knowing what ought to be done, and how to get it done. The board should judge results, but not methods. It should leave the question of methods to the experts. If the experts can't get results, they should be removed and others chosen who can.

The most important duty of a school board is the selection of a superintendent of schools. Here care must be taken to avoid the mistake of thinking that anyone who can get the position can fill it, or that anyone who will accept a large salary is worth it. A superintendent should be chosen because of his education, experience, and personality. Having been chosen only after most careful investigation and consideration, he should be given a contract for a term of years, that his policies may have time to be developed. Having been employed for a term of years, he should be given absolute authority in the formation of the course of study, the selection of textbooks, and the assignment of teachers, and very large if not com-

plete authority in the selection and dismissal of the teaching force. Being given this authority, the board should hold him responsible for results. The board members should keep themselves informed regarding the superintendent's policies, and should use all their influence to help him make them a success, and to keep down friction between the schools and the patrons. Here is a place where they may be of very great assistance. Altho the superintendent should have the final authority in all these matters, he should consult the board freely before making any changes in the school policies.

The school board has an important duty in the financial management of the schools. The members should select a business manager, or clerk, who, working under the direction of the superintendent of schools (because the whole purpose of the school system is educational) should have large authority over the finances and the strictly business affairs. The board should determine how much money the schools can spend. After listening carefully to the recommendations of the superintendent and the business manager, the board should decide upon the salaries and the budget of the other expenses. They should organize and administer the finances of the schools in such a way that they will get the best school possible for whatever expenditure they feel that the school district can and should make.

The duty of the superintendent is to advise in financial affairs, to decide matters of educational policy and administration, and to get results. The duty of the Board is to advise in matters of educational policy and administration, to decide the financial questions, and to judge the results. Under these general rules, any broad minded board and tactful superintendent will work smoothly with never a thought of inharmony or friction.

A SCHOOL COST ACCOUNTING SYSTEM.

The commercial department of the Michigan City Public High School has been established for some fourteen years. In order to get away from the routine manner of conducting the work of this department every effort has been made to bring in material which would be live and which would hold the interest of the students. A great criticism of the training offered by such a department has been that students coming from these classes, into actual working conditions in offices and other places, must readapt themselves to the practical situation in which they find their work. To overcome this feature of our difficulties we have, from time to time, established lines of work in the commercial department which put the pupils into touch with actual working conditions, as they would be found when these pupils come to go out into the business world.

At the opening of school in September, 1915, the Board of Education offered its co-operation in making it possible for the commercial department to establish a cost accounting system for

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"HOW CAN SCHOOL EXPENDITURES BE MINIMIZED WITHOUT IMPEDING PROGRESS?"

Wm. Dick, Philadelphia

The subject of increased expenditures in the operation and maintenance of the public schools of our country, as well as providing for the ever-increasing capital outlay necessary for permanent improvements, is one to which school executives and administrators are giving their best thought and attention.

Dr. Schaeffer, Superintendent of Public Instruction of Pennsylvania, is quoted as saying the rock upon which the public schools will ultimately split is "expense." More and more each year (each day, we might say), we are reminded of the necessity of giving the most careful scrutiny to the various plans submitted by school heads and others for the betterment of school systems, community interests, and other educational activities, and, incidentally, for the depletion of the school treasury.

For many years during the earlier periods in the development of our school systems the policy pursued by those in control was "how little" could be allowed for the support of the schools. But with a general awakening and a fuller realization of the possible advantages resulting from well-organized and fully-equipped schools, the policy of liberality in their support has become so firmly entrenched in the minds of the American people that the first thought now with the appropriating authorities is how much can be set aside for the schools.

The Danger of Extravagance.

With this prevailing viewpoint, the tendency toward extravagance and waste is but a natural possibility. Like the average individual, increased income brings proportionately (and more often unproportionately) increased needs—or perhaps increased wants would be a more appropriate term. If the money is at hand, we can more easily make ourselves believe that we need the latest model in automobiles. If our bank balance is of a shrinkable nature, we are likely to put up a little longer with our "flivver."

So it is with the average school official or school principal. If the money is in sight, requisitions are made that otherwise would not have been presented. Look where you may, you will find steadily growing school expenditures out of all proportion to the yearly increase in school revenue, which of course cannot go on indefinitely without inviting disaster and bringing to us another appellation of the three R's—Reckoning—Rebuke—Ruin.

This organization is composed of school officials whose chief duties are of a financial character—to regulate and control the receipts and disbursements of school funds. The various boards of school directors look to their fiscal officers for a proper accounting of the trust that is imposed upon them by the taxpayers. Necessarily then, these same officials play an important part in the conduct of the school system. To get the best results, there must be the fullest co-operation between the officials charged with the educational and physical needs respectively.

Co-operation and Responsibility.

The SCHOOL BOARD JOURNAL in a recent issue, speaking along the line of co-operation between the business and educational departments of a school system, says: "The secretary should be recognized by the superintendent as an expert in his field just as the superintendent recognizes the judgment of the heads of departments in the high schools and the supervisors of special sub-

jects. The superintendent should cultivate a sympathy for the viewpoint of the secretary and should modify his demands to meet the reasonable financial and commercial tests which the secretary must necessarily apply in all business affairs. If this is done and if, further, a spirit of consultation and co-operation is developed, there need be no cause for friction whatever."

Too often it is held by the superintendent or pedagogical director that it is his duty to prepare, submit, and recommend, without regard to cost, that which should be done along professional lines in conducting the schools, and place the responsibility of approval or rejection upon the Board of Education. I am not at all in sympathy with such radical views. As I have said on a previous occasion, I believe that the school board has the right to expect that all its officials shall carefully consider, in connection with their recommendations, the means at hand or in prospect, to carry on the work as recommended, and to discriminate accordingly.

So we ask ourselves, how can school expenditures be minimized without impeding progress? I recognize, of course, the futility of making any suggestions that would be applicable to all school districts; but, in a general way, I hope to point to some of the danger signals that may make us at least stop, look, and listen.

Building Sites.

In the first place, let us take up the matter of the purchase of school sites. Perhaps in no single item of expenditure is there such liberality displayed as is often evidenced in the acquiring of a site for a new school building or an addition thereto. Particularly is this true where improved property has to be obtained in the built-up portions of the city. Any officer of a municipality or school district charged with the duty of securing property for public improvements will tell you it is a well-known fact that, when it comes to purchasing property for a public improvement, the owners thereof seldom show any compunction of conscience in their demands for compensation. It is a popular belief that it is quite excusable to make the public pay most exorbitantly for property needed for such purposes, and so intent are the owners, at times, upon depleting the public treasury, that all kinds of deceptions are resorted to in order that extravagant prices may obtain. Where there is not the strictest scrutiny and care practiced by the school authorities, this indirect robbery is often consummated. I have in mind several cases where the sworn affidavits of owners as to their own valuations were so much in excess of what they had but recently sworn to, before the tax board, in an endeavor to have the assessment lowered, that it would seem perjury was not considered a crime in establishing claims against the public treasury. Another element of waste in the acquiring of school sites is the method too often in vogue, of waiting until the particular locality is improved with newly-built residences before steps are taken to procure the necessary school site. If those charged with the duty of providing additional school buildings were to watch carefully the building development of a town or city, and purchase or acquire school sites three or four years in advance of the growth of a neighborhood, such sites could be obtained at a saving of from fifty to one hundred per cent. The interest on the money invested in the site, while it was lying idle, would be small in comparison with the saving effected.

The continued growing cost of schoolhouse construction is an item of expenditure that needs to be carefully watched. Modern fire-proof, sanitary schoolhouses are absolutely necessary for the housing of our children, and even where the law does not require such provision, I would not deprive our boys and girls of the slightest comfort or omit anything that is needed for their safety. But watchfulness and close scrutiny of plans and specifications are needed to prevent expenditures for unnecessary items that often add to the building nothing but expense, both in construction and maintenance.

Bonds and Taxes.

The selling of bonds in advance of the time needed to meet obligations is a leak in expenditures easily calculated, and should be effectually stopped. Borrowing money at four or four and one-half per cent and having it lie idle in bank at two or two and one-half per cent is not practised in the business world, and it should not be employed in municipalities or school districts. It may be said that the money must be obtained and appropriated before contracts are entered into, even tho the actual disbursement of the funds, or a large portion of it, does not take place until the school building is completed. Pennsylvania has solved this problem by giving the school board contractual power to the extent of the loan as soon as it is authorized, without waiting for the actual selling of the bonds.

Long or short term bonds, serial or otherwise, with attendant sinking funds, constitute a problem of school expenditures and involve opportunities for savings, upon which I shall not touch here, inasmuch as this subject has already been discussed in another paper.

Promptness in following up delinquent school taxes often prevents a loss in revenue. In Philadelphia, we have found that the employment of delinquent tax notice service has been the means of enriching our treasury. It has also kept alive as revenue producers certain properties that might otherwise have remained delinquent until such times as delayed sheriffs' sales and other litigation, with attendant costs, would have prevented a realization in price sufficient to discharge the obligations due the school board.

Waste in Printing and Clerical Work.

One very wide avenue of waste is the item of printing the various forms used for school reports, records of attendance, etc., much of which, by reason of special ruling, is expensive. Our experience has taught us that, owing to frequent changes in printed forms, we often find ourselves with a large amount of discarded printed matter than can be used for scrap purposes only. Without the most careful scrutiny of requisitions of this character, this element of cost can be made to show a very large leak.

The duplication of clerical work in the several departments of a school system is often productive of waste that can be eliminated by careful pruning, with benefit to the school treasury. This is more particularly true in these days when we are indexed from the cradle to the grave.

Saving in Textbooks.

One phase of this subject is the cost of textbooks and other educational supplies used in the various activities of a school district. You might be interested in hearing some of my personal experiences during the past year in dealing with requisitions of this character.

Finding the expenditures for textbooks and other schoolroom supplies increasing to an undue extent and the cost of new classes, such as

Editor's Note—This paper was read before the National Association of School Board Accounting Officers, May 17, 1916.

elementary manual training, increasing beyond measure, it was deemed necessary to scrutinize the requisitions more closely with the idea of exercising some restraint that would prevent unnecessary demands on the school treasury.

To establish the desirability and necessity for a businesslike supervision of requisitions and requests for supplies, where the source of the request is pedagogical, we introduced a new system of supervising requisitions for books and supplies. The first step along this line was the inventorying of all books in a usable condition in the various schools. This inventory was really a cumulative record of the books purchased and dispensed with during the year, and informed both the principal of the school and the accounting officers of the district of the condition of the school in relation to textbooks. Provision was made also for a current report of the number of books dispensed with because they were worn out, obsolete, or insanitary.

Coincident with the adoption of the above forms, a requisition form, which gave information as to the quantity on hand, the reason for the order and the quantity required, was also adopted and placed in operation. Prior to last year, it was the practice in Philadelphia to furnish the schools with books and other educational supplies on what might be termed the allotment system. To supply the individual school and prevent it from obtaining a large quantity of books and supplies at the expense of another school, a portion of the appropriation, based on the number of pupils belonging, was allotted to each school.

The direct result of this method of purchasing books and supplies was to have a practice grow up in the respective schools of ordering to the full amount of the allotment, regardless of actual needs. The only excuse for this practice was its universal acceptance in the various city departments and bureaus.

Economy Without Loss of Efficiency.

Under the operation of the inventory this condition was glaringly apparent and immediate steps were taken to prevent, so far as possible, the purchase of books which would increase only the numbers on the shelves, until some disposition could be made of the great number of obsolete books.

Since the principle "Order only what you need for the term in which you are working" was promulgated, there has been a decrease—not a saving—in expenditures of something over \$70,000, because under the lack of system and supervision previous to 1915 the schools were stocking up for the next six to twelve or more months. This restraint has been exercised—the schools have been given smaller, but adequate quantities of books and supplies, and information for the proper exercise of executive control has been received, without impairing the efficiency of the teacher or impeding the progress of the work in the school.

Thru experience gained during this one year, it was decided to consolidate all forms involved in the requisitioning for supplies into the form of a requisition book with all authorized books and articles printed therein.

This form has been in operation since September, 1915, and has thus far given very satisfactory results. It lessens the clerical work on the part of the principal of the school; it gives current information to the approving officers in one report, which previously was contained in three; it is a perpetual inventory of books and supplies; and it is the basis for computing the cost of the following activities in the various schools:

- A. Regular Classes.
- B. Kindergarten.
- C. Vocational Education:
 1. Hand Work 1st, 2d and 3d Grades.

2. Hand Work 4th, 5th and 6th Grades.
3. Shopwork.
4. Domestic Science.
- D. Special Classes.
- E. Continuation Classes.

The open list for textbooks without proper supervision, both professional and lay, tends to indiscriminate buying and waste. This has been shown in the introduction by a teacher of a newly-adopted book or series of books to change the texts in use in the school before such books are worn out. The consequence is that these books, usually in good, usable condition, the text of which is still in accord with the prescribed course of study, are discarded to the shelves and the school soon becomes overstocked.

In a recent effort to dispose of this surplus of obsolete books, it was found that, in some subjects, many schools had more books on the shelves than pupils in the school.

Discarding School Books.

It has been found advisable to make the discarding of books subject to strict inspection, that the principal, in a zealous effort to keep strictly up-to-date in the matter of text, be not led to discard good, usable books in hand for some newer book just placed on the authorized list. It may be argued that this is interfering with educational progress, in that it prevents the adoption of new ideas and texts by the teacher and does not permit of the teacher's obtaining the best results from the pupils. Before such restraint was placed on the principal, a committee of teachers and principals was requested thru the Superintendent of Schools to investigate and report on the number of books in each subject, regardless of text, necessary for each grade.

The result of their investigation and study of the question was a comprehensive list of books required per school, which left the pedagogical initiative to the principal and teacher. This list considers all books in the school, unless obsolete by reason of changes in the course of study or the date of publication, in good condition, usable and to come within the prescribed list.

After such time as the books (obsolete and otherwise useless) may be worked out of the school, all book orders will be essentially replacements to keep the stock up to standard. This restraint is not intended, and will not be permitted, to go so far as to say that a teacher may not change texts, but no change of text will be approved until such time as the books of the text in use in the school are worn out, and thus practically worked out of the school.

To obtain this result, all books which are to be dropped from the authorized list, on the recommendation of the Superintendent of Schools, are to be made available for requisition by the principal for a period of one year. Such books so designated can be ordered in such quantities only as may be necessary to fill out sets and a requisition for a larger quantity will not be honored.

A feature of school expenditures, brought about probably by the desire of the school principal to be up-to-date, causes one to wonder to what extent school funds set apart for equipment may be used in meeting auxiliary expenses. Electric stoves, linen towels, baby outfits, stop watches, vaulting poles, baseball bats, gloves, masks and other athletic equipment may all be considered necessary in various school activities. But one with an old-fashioned turn of mind may be excused for asking, How far we shall thus go in the use of funds, collected from the taxpayer for the support of schools, before reaching the limit?—or, Is there to be no limit?

Planning to Reduce Waste.

I am mindful of the fact that, altho I have called attention to several opportunities for

waste and extravagance, I have not suggested any definite plan of action to prevent them. Indeed, I am sure there could be no scheme submitted that would be as effective as we would like to have it.

What then should be the general plan adopted to minimize expenditures without impeding progress? What better can be suggested than to have uppermost in our minds that there are just one hundred cents in a dollar and no more?

Let us then, prior to fixing our tax levy and estimating our revenue, ascertain from the several departments just what is contemplated in the way of new activities, etc., and appropriate accordingly. Hold to the program upon which the revenue was based, postponing until the following year any extensions involving expenditure of funds not at hand. As Earle Clark, in his "Financing the Public Schools," says:

"Students of school administration have never agreed, nor in view of the complexity of the question would it be easy for them to agree as to how much a city should spend for schools for each person in the population, per \$1,000 of wealth, per child of school age, or per child attending school.

"In the absence of such a definite standard a city's expenditure for school purposes may best be measured and evaluated by comparing it with the expenditures of other cities. This does not mean that the expenditure of any city, or the average expenditure of a group of cities, represents the ideal. It means rather that, as cities are working toward a common end, in the face of common difficulties and obstacles, the average achievement of a group represents the prevalent attainable ideal for American cities. The prevailing practice is not the goal toward which educators are working, but a compromise between what is thought to be desirable and what is found to be possible. It serves as a convenient scale by which to measure achievement."

Utilizing the School Plant Fully.

A possible source of waste can be avoided in some of our overcrowded schools where the part-time evil necessarily exists, by a fuller utilization of the school plant and teaching corps.

With the introduction of vocational training has come the establishment or enlargement of the shop work. Schedules have been arranged assigning a class for hourly periods to the several departments—boys to the shops for manual training and girls to the sewing and cooking classes. By this arrangement at least one classroom is vacant each of the five hours of the day, with the grade teacher minus a class to instruct.

In schools of this character, with pupils receiving only part-time instruction, there is presented an anomalous condition difficult to explain satisfactorily. In large schools composed of parallel grades where there is departmental teaching, no reason other than mismanagement can justify such waste of time, equipment and money. Even in schools where departmental instruction is not employed and where there are no parallel grades, it has been shown that the vacant classroom in question, with the teacher whose class is taking the vocational instruction, can be utilized to the fullest extent by a judicious rearrangement of the school roster and organization.

This will result not only in a reduction in the number of part-time pupils, but will save the full salary of one teacher. In fact, I am reliably informed that by a reorganization of a number of the smaller unit schools in a given locality, whereby the seventh and eighth grades (always less congested), could be brought together in one building, a further saving of time, money and equipment could be effected.

High School Costs.

Another important factor that largely influences the expenditures of school boards, more particularly in the larger cities, is high school organization. This subject being one involving pedagogical control and direction, I would hesitate to speak upon, were it not for the fact that

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How Shall We Handle Our Purchases This Year?

Melvin Rice



School boards thruout the country are in the midst of the preparation of lists of Annual Supplies for the coming school year. Following, and coincident with the preparation of these lists, the real work of business administration will begin. We ought, this year, to exercise great care in selecting the supplies for the schools. Nothing should be used next year simply because it was used last year, or the year before. There may be "something new under the sun," worth considering, and if we will put on our "specs," it is possible that we shall find something, in some little nook or corner in the school program that ought to be "junked," or sent to the allies, even tho it may have been used from the time "whereof the memory of man runneth not to the contrary."

Aye, while here, let us pause to remark that one of the greatest regrets in the school business is that school affairs are not amenable to the laws of business, or subject to the tests of real economy and efficiency that men are willing to apply to their private affairs. Institutionally the schoolman is a paradox. He is a builder of nations, yet he could not enlist with Don Quixote in a fight against a first-class shuttle-cock. The explanation of this lies in the fact that we have come to realize that it is impossible to maintain a perfect standard of inertia without the support of self-serving sentiment, and the adherence to antiquated methods. If school administration were a matter of advancement and the attainment of high standards in all its phases, nothing could prevent the adoption of scientific methods, and the displacement of all that which does not contribute to real educational progress.

The matter of buying school supplies is not the least important phase of administration; nor can we agree that it is the most important; but it should receive important consideration, and not be left to chance as are many other vital school matters that constantly escape our notice.

The first step to be taken in the purchase of supplies is to find out what is needed. The records of the storeroom must first be consulted to ascertain what has been sent to, or consumed by the various schools during the preceding period. In this way accurate estimates can be made up as a guide to purchasing, and for the convenience of prospective bidders. If the board of education does not know how many brooms, cases of crayon, gallons of disinfectant, or bundles of construction paper it has used, or will need for the year, it is not reasonable to expect that merchants will know enough about it to enable them to quote the lowest and best prices. Merchants will be obliged to protect themselves.

It often happens that where exact amounts of supplies required are not stated, prices will be submitted based on relatively large amounts, and the orders when received by the merchant will be found to be for fractional parts of the quantities bid on; this results in a loss to the merchant, and it is one of the reasons why he does not seem to be more enthusiastic about trying to get the school business. He can not get

enough definite information from the school board to permit him to bid intelligently. That is one phase of school administration.

Following the matter of making up the lists comes the matter of securing bids. As a means of facilitating this process, it has been found advantageous, even in small school systems, to arrange the supply lists on printed sheets, incorporating therein all the conditions to which bidders must agree before contracts may be awarded to them. By this method the different classes of supplies are segregated on lists, called "Bid Sheets," and are printed in sections according to convenience. For instance the General Education Supplies may be included in a list designated "Schedule A," and the General Operating Supplies, on "Schedule B."

What the "Bid Sheet" Looks Like.

The following items taken at random from the bid sheet used in a system buying about \$15,000 worth of supplies a year, will afford a concrete example of the manner in which the specifications are prepared. The schedule, if a great number of items are included, will be printed on a series of sheets, each being numbered. It will be understood that a complete "Bid Sheet" consists of a "proposal," a list of the items definitely described as to amounts, quality, etc., together with a form of contract and bond. On the final sheet, the bidder signs for the entire document, which, without more, becomes a binding contract as soon as the board passes its resolution of acceptance.

In some states purchases over certain specified amounts must be made under competitive bidding after advertisements have been placed in local newspapers. Whether or not this provision is mandatory, it is good policy to advertise for bids in the open market. Should the advertising be limited to local newspapers, it will also be found profitable to insert the same advertisements in good school board papers, or trade papers that reach the school trade.

Advertisements, however, calling for bids under the different schedules should be set far enough apart as to dates for the awarding of contracts so that one schedule can be com-

pletely disposed of before taking up another. Such a method is better than making all purchases under a single schedule, or at a single board meeting, particularly in cases where office or warehouse space is limited for the handling of large quantities of supplies at one time, or where the roster of employees available for such work is small. In the smaller cities and school districts there would, of course, be no advantage in separating the lists, as they could as well be handled at a single operation.

When the board has opened the bids and found them to conform with the stipulated conditions in the bid sheet, and regular in all other respects, it instructs the secretary to make a list of bidders with their addresses, noting thereon the amount and character of the deposits filed with the bids, and such other information as may be desired.

By resolution, or order of the president of the board, the committee on supplies is authorized to examine into the samples and prices submitted and instructed to make a report of its findings together with its recommendations to the board at some future meeting.

The secretary, supply commissioner, or business manager tabulates the bids, "blinds" the samples, and turns them over to the committee. The committee is then ready to act without reservation, for it does not know whose samples or prices it is considering. The tags which it finds attached to the samples simply tell it whether or not the board can afford to buy the articles under examination, bid for bid.

The committee is at liberty to call for its assistance the various supervisors, engineers and heads of departments, in order that the right kinds of supplies may be selected for purchase. Nothing should be recommended for purchase that will not stand up to the tests and requirements of the work in which it is to be used; quality and price, of course, are the determining factors in the adoption of supplies.

The Orders.

When the committee is thru with its labors, the board then passes on the purchases. At this

BID SHEET—SCHEDULE "B". 1915-1916.

Specifications of Hardware, Brushes, Soaps and Cleansers, Toilet Paper and Miscellaneous Janitors' Supplies.
NOTICE:—The following items listed hereunder are to be delivered to the Store Room of the Board of Education, unless otherwise specified.

IT IS AGREED THAT ALL DELIVERIES ARE TO BE MADE PRIOR TO SEPTEMBER 1.

Bid Separately on Units Composing Each Item Number.		Unit Price
Item No.		
39.	AXES (Board's Sample)— 1 doz. handled Axes, Plumb's first quality.....	per doz.
43.	BROOMS (Submit Sample)— 25 doz. Undyed Illinois corn brooms, 5-tie, 34 lbs. to doz., 38-in. handles in clear.....	per doz.
44.	BUCKETS (Board's Sample)— 10 doz. Extra heavy galvanized, 14-qt. Republic Metal Ware Co., No. 2850.....	per doz.
45.	CHEESE CLOTH (Submit Sample)— 2,500 yards best cotton thread, 36-in. wide, weight not less than 12 lbs. to 100 yards.....	per yd.
55.	FEATHER DUSTERS (Submit Sample)— 20 doz. 18-in. Turkey Tail Feather Dusters, each guaranteed to contain 125 feathers, with cuff and detachable handle.....	per doz.
56.	FLOOR BRUSHES (Submit Sample)— 30 doz. gray Russia bristle, with inner portion of 1-6 mixed fibre and bristle, hardwood maple block, 3-in. wide, 14-in. long; 2 handle-holes, center bristles 4-in. clear of block, 6-row end, 27-row side, pitch set, with stock handles free from knots.....	per doz.
57.	WASTE BASKETS (Submit Sample)— 5 doz. Waste Paper Baskets, tin bottoms, double wire, heavy weight, 17 to 20 gauge wire body; 15-in. top, 10-in. bottom, 12-in. height, 12-gauge wire rims.....	per doz.
Subject to the conditions referred to on page one of this Bid Sheet attached hereto on Schedule "B" of the annual supplies of the Board of Education, for the year 1915-1916.		
Sheet No. 6.		Bidder.

time the deposits of unsuccessful bidders may be returned.

A resolution goes on the minutes something like this:

"Bids on the Board's annual supplies under Schedule "A," having been opened in regular meeting on the day of, which were referred to the Supply Committee, and the Committee having made its report, together with its recommendations on the supplies selected by it to be purchased under said schedule, it was duly moved, seconded and carried that the Committee's recommendations be concurred in, and that contracts be awarded for the designated supplies in accordance with the terms contained in said schedule."

When the board awards the contracts a formal order is issued to the successful bidders. It may be by letter, or on the regular order form. A triplicate order book is one of the necessary things in an up-to-date purchase system. There should be an original copy for the merchant, a duplicate copy for the school, storeroom, or department to which the goods are to be delivered, and the triplicate copy should remain unperforated in the book as an office record. Each form should be printed on different colored paper.

Such a system goes a long way toward the elimination of errors, and facilitates the work of auditing current accounts.

Board of Education, City Schools		ORIGINAL DEPARTMENT OF SUPPLIES Order No. 2993	
To _____		Date _____ 191__	
Gentlemen: Please deliver at once the goods listed below. Mark shipment		NOTE—All invoices must bear our Order Number and be filed in the Secretary's Office, and a copy sent to the department receiving the goods.	
"Board of Education, for _____"			
QUANTITY	ARTICLES	PRICE	TOTAL
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
I certify that the above supplies are needed in the departments specified.			
Goods Received _____ 191__		Principal _____	
Quantity and Count O. K. _____			
Quality O. K. _____			
Contract O. K. _____ [For Auditor]		BOARD OF EDUCATION	
Approved for Payment _____ [For Auditor]		By _____ Secretary.	
\$ _____			

Form Used in Issuing Orders. The original is printed on white paper; the duplicate on buff; the triplicate on primrose.

Hobbies: Examinations—Credits—Experience

William R. Lyman

Children in play get astride of broomsticks and imagine they are riding a horse. Play horses are not always laid aside when maturity comes for we see various people riding hobbies thru life, vainly imagining that they are getting somewhere by so doing.

If I could draw I would like to make a cartoon of the superintendents and school board members astride some of their phantom horses. They prance and they dance and they paw the air, but their riders get no farther in the educational world, than the children on the broomsticks. Children soon tire of their play horses, but it is almost impossible to unseat a superintendent or a school board from a pet hobby.

The first one I think of is the Examination hobby. In the beginning this was a device to keep out the unworthy and incompetent, who might be elected because of politics or religion or relationship with an influential citizen. Incompetence in the schoolroom is not altogether a matter of ignorance, so the examination may not eliminate the coarse and slangy, the crude in manners, the slatternly and careless in dress, and the impatient and unsympathetic to children. There is many an incompetent teacher who can write an excellent examination paper, for the excellence of a teacher is never governed entirely by the storage capacity of her brain. Ignorant teachers are of course intolerable but the school board which rides the Examination hobby will surely fill its schoolrooms with some undesirables.

The second hobby is named Credits. It demands college degrees, normal diplomas and post graduate study. In this system all salary adjustments are made upon the cramming a teacher can do out of school hours. Sometimes the studies pursued may be absolutely unrelated to the work the teacher does; but if the recording angel of some college or university has a mark down on the books it is a Credit and obtains an increase in salary.

The following case is so absurd that one wonders if the officials were really sane: A fourth

grade teacher had been recommended by every supervising officer for an increase in her salary because her work was of a very high standard. She was already receiving the maximum for her Credits and the recommendation was ignored. During the summer she remembered that she had had a couple of extra credits on graduating from high school. She consulted the books and found a year of bookkeeping and a term of Greek. These valuable additions to her daily work in an elementary grade brought her an increase in salary which had been denied her for real efficiency.

Now Greek and bookkeeping, to my mind have as much to do with the qualifications of a fourth grade teacher as the ability to play a flute has to do with a railroad engineer.

Again in the same system another teacher took a leave of absence for study of advanced pedagogy in a leading university. She worked hard and gained much in subjects pertinent to her work but was taken ill at the end of the term and was unable to be present at final examinations so her marks were never recorded. The school officials in this case refused to grant her the additional salary which her year of study and expense deserved tho they were very glad to profit by her new ideas and added efficiency. Would any businessman in his right mind quibble over such trifles in adjusting the salary of his employees?

I would be the last to advocate laxness in educational requirements of teachers but I know that all the degrees and diplomas of all the colleges in the country do not always make a first-class teacher. Are you paying for service or riding the hobby of Credit?

But racing neck and neck along the road there comes another phantom horse named Experience.

It is true that some teachers gain in the quality of their work, their tact in handling classes and other points of excellence from year to year, but there are others who might teach

from now till doomsday and still be scatter-brained, careless and inefficient. Every school system is clogged with just such as the latter and no one dares to suggest that they seek another means of support for "They have had years of Experience."

One case comes to my mind at this moment where a young teacher just out of college has taken a class which had been badly mismanaged for two years by an experienced maximum salaried teacher. The younger teacher has brought order out of chaos, and has done far better work even in her first year than the older teacher ever will do. The experienced teacher is transferred from building to building as each principal despairs of making her over. But she still draws the maximum salary, while the really efficient young woman must work for a period of three to six years to gain her maximum.

Another case, along the same line is that of a supervisor of a special subject who succeeded an elderly person, partially deaf and well behind the times in her subject, but who was drawing a maximum salary. The school board and superintendent were exacting in requirements and secured an experienced teacher with the best possible training. Taking advantage of an attractive location and other circumstances and by promise of rapid advancement, they induced the applicant to accept a salary nearly thirty per cent lower than they had been paying. They have been more than satisfied with the new supervisor's work, and there is a rapid improvement in the subject under her management. At the end of three years the new teacher is nearly one thousand dollars out of pocket, and it will take her six years to work up to the salary of the inefficient predecessor. Is it fair?

Would any businessman pay a good price for inferior service and cut his price for a better man, simply because the new man had not been on the payroll for a given number of years?

Another queer point about this Experience hobby is that no superintendent or school board will trust another man's horse. It must be born

(Concluded on Page 93)

Serial Loans Versus Long Term Loans

Lorin C. Powers, Chief Clerk and Statistician, Board of Education, Philadelphia, Pa.

The fact that the demands for increased expenditures are, in the present-day school district, growing at a rate far in excess of the increase in the revenues available to meet the same, of necessity is causing an ever intensified study of measures conducive to greater efficiency. In many states, as in Pennsylvania, the limits of the possible revenues are very definitely set, so that methods productive of greater economy in all lines must be adopted.

The casual citizen when informed that the School District of Philadelphia has 26,543 children on part time out of a total average number belonging, 209,171, is inclined to answer in the care-free way of the thoughtless that the School District has a very large borrowing capacity and why should not bonds be issued in sufficient amount to put up buildings enough to care for all children in a proper way. It is said that this is a day of doing big things in a big way. The citizen may point to the fact that the city is going about things in the right way and has voted to issue a loan for \$115,000,000, to care for its needs.

It is not the purpose of this paper to suggest means of solving the so-called "part-time evil" but rather to draw attention to the constantly growing part of the revenues which are required for "debt service," or for interest on and the ultimate liquidations of borrowed money, and to discuss the most efficient method of handling the same.

In 1912, when the present School District of Philadelphia came into existence, the amount required for debt service was \$559,420.00 out of a total of \$6,793,106.44 disbursed for current expenses or 8.2 per cent. For 1915 it was \$1,093,599.65 of a total of \$9,383,078.36 or 11.6 per cent. This growth within a period of only three years is fairly illustrative of most school or municipal corporations of the present day.

Methods of Paying Bonded Indebtedness.

To the average person it seems an easy method of meeting present needs by borrowing money and repaying the same thirty to fifty years from now. But the piper always must be paid and the problem of borrowed money resolves itself into a discussion as to (1) how most equitably to distribute the burden caused by the debt and (2) how most economically to repay the loan.

When in 1716, Sir Robert Walpole, then prime minister of England and first lord of the treasury and chancellor of the exchequer, established the first sinking-fund, the general impression was that a sort of Aladdin's lamp had been discovered which would pay a debt in a magic fashion without much money. While it is true that a sinking fund, which is a fund formed for a gradual "sinking," wiping out, or reduction of debt, by various devices for the accumulation of money, is one of the most advantageous methods for repayment of debt, it is not the only advantageous and economical method of handling the matter.

Outside of the simple expedient of paying the debt when it falls due, which causes no burden on account of principal during any of the years of the life of the loan, except the last year when the whole burden must be borne in a back-breaking load, there are three recognized methods, each of which is capable of variations, as follows:

1. The payment of equal annual instalments of principal.
2. The payment of equal annual instalments of principal and interest combined.

3. The setting aside in every year as a sinking fund and accumulating in the way of compound interest such a sum as will, with accumulations in the way of compound interest, be sufficient to pay off the money so borrowed within the proper period.

The three methods just stated are more commonly referred to as:

1. The instalment method.
2. The annuity method.
3. The sinking fund method.

The Methods in Detail.

Any discussion of these three methods and their comparative merits they must consider them from the standpoint of (1) the cost of repaying the loan, and (2) the charge upon the revenue accounts of the successive years of the repayment period.

The instalment and annuity methods both provide for the actual repayment to the lender each year of a definite proportion of the loan, or of the loan and interest combined. The sinking fund method, on the other hand, is based upon the provision annually of an instalment of such an amount as will, if set aside, invested and accumulated for the prescribed period, provide for the repayment of the loan in one sum at the end of the period.

The *Instalment Method* is one in which the loan is repaid to the lender by equal annual instalments of principal only, and interest is paid to him upon the balance of the loan unpaid. This method is commonly used in commercial and financial undertakings and is known as the deferred payment system. The instalment method is exceedingly simple in operation inasmuch as it is only an arithmetical calculation, and does not in any way involve the question of compound interest.

Except for temporary loans which are repaid within a few months to a few years and which are not considered in this paper, the repayment period of school district or municipal loans is usually thirty years or longer, but in order to simplify the presentation of the problem and to enable a comparison with the annuity and sinking fund methods, the following showing indicates the cost of repaying a ten year, one thousand dollar loan, bearing interest at four per cent by the instalment method.

Example I—The Instalment Method.

Showing the cost of a \$1,000 loan for ten years with interest at 4 per cent, with equal annual payments of principal only.

Year	Repayment Principal	Interest at 4%	Total
1	\$100	\$40	\$140
2	100	36	136
3	100	32	132
4	100	28	128
5	100	24	124
6	100	20	120
7	100	16	116
8	100	12	112
9	100	8	108
10	100	4	104
Total	\$1,000	\$220	\$1,220

The *Annuity Method* is one under which there is, as in the case of the instalment method, an actual repayment each year to the lender, the whole of which is charged to the revenue of each year. In this case, however, the lender receives an equal amount each year, composed of principal and interest combined. To the extent that it involves an equal annual charge upon the revenue account of the school district

during the whole of the repayment period, it is an improvement upon the instalment method, but it does not have any advantage to the lender. The following is a showing of this plan:

Example II—The Annuity Method.

Showing the cost of a \$1,000 loan for ten years, with interest at 4 per cent, with equal annual payments of principal and interest combined.

Year	Repayment Principal	Interest at 4%	Total
1	\$83.29	\$40.00	\$123.29
2	86.63	36.66	123.29
3	90.09	33.20	123.29
4	93.68	29.61	123.29
5	97.44	25.85	123.29
6	101.34	21.95	123.29
7	105.39	17.90	123.29
8	109.61	13.68	123.29
9	113.98	9.31	123.29
10	118.55	4.74	123.29
Total	\$1,000.00	\$232.90	\$1,232.90

As can be seen from the above example the annual amount repaid to the lender consists of an increasing amount of principal and a decreasing amount of interest; and, further, if the lender be a trustee or requires for any purpose to distribute the amount received annually as between capital and income, he must make a somewhat difficult calculation. The lender has to reinvest each year a gradually increasing amount of principal unless he sets aside an equal annual proportion of the amount paid to him as a sinking fund.

By the *Sinking Fund Method* is here meant the accumulating sinking fund which provides for the setting aside each year, and accumulating by way of compound interest, such a sum as will be sufficient to pay off the money borrowed within the prescribed period. The amount required for the repayment of principal and interest under this method is as follows:

Example III—The Sinking Fund Method.

Showing the cost of a \$1,000 loan for ten years, with interest at 4 per cent, to be repaid by equal annual instalments to be set aside and accumulated as a Sinking Fund at 4 per cent per annum.

Year	Annual Instalment	Interest	Total
1	\$83.29	\$40.00	\$123.29
2	83.29	40.00	123.29
3	83.29	40.00	123.29
4	83.29	40.00	123.29
5	83.29	40.00	123.29
6	83.29	40.00	123.29
7	83.29	40.00	123.29
8	83.29	40.00	123.29
9	83.29	40.00	123.29
10	83.29	40.00	123.29
Total	\$832.90	\$400.00	\$1,232.90

The sinking fund method is the one in most common use by local authorities for the annual provision for redemption of debt. It has the same advantage as the annuity method to the taxpayer of equality of annual requirements, and is more advantageous to the lender in that his income is fixed and his principal returned all at one time.

Since the interest paid upon the loan is quite outside the question of the sinking fund, the rate of the fund may and generally does differ from the rate of interest payable to the lender. The laws of some localities provide that the local authority may apply the whole or any part

Editor's Note—This paper was read before the National Association of School Board Accounting Officers, May 17, 1916.

of the sinking fund in the repayment of the debt, but if they do so, they must pay into the sinking fund annually a sum equivalent to the interest which would have been produced by that part of the sinking fund so applied.

This provision is absolutely necessary, as the sinking fund is calculated to accumulate at a definite rate per cent; and if any part of the fund be used to repay part of the debt, the fund will be deficient to that amount and will lose the interest upon the portion of the loan so applied.

In practice it is usual to estimate that the sinking fund will accumulate at a lower rate per cent than the interest paid upon the loan. This is in order to provide for a fall in the rate of interest obtainable upon first-class investments, and it results in a larger annual instalment being set aside than would be the case if the sinking fund were calculated to accumulate at the higher rate of interest paid upon the loan. The general practice, when loans are redeemed out of the sinking fund, is to pay into the fund the actual amount of interest previously paid to the loan holders. Any surplus thus arising helps to make up the deficiency caused by the low rate of interest obtained when part of the sinking fund is in bank awaiting investment, as often happens.

Comparison of the Three Methods.

It is now possible to compare the repayment of loans by the instalment, annuity and sinking fund methods as outlined above.

The annuity method, while having certain advantages such as the regularity of annual requirements from revenue and freedom from complication of the amount of income to be derived from annual instalments accumulated at compound interest, has certain other disadvantages which have not, to the writer's knowledge, ever caused its use by a municipal or school corporation.

The total cost of the annuity method is greater

than the instalment method as shown by comparing examples 1 and 2, and the return of the principal to the investor is in varying amounts most difficult of determination and statement particularly in connection with trustee accounts.

The sinking fund method, as shown by comparing Examples 2 and 3, will theoretically cost the same as the annuity method. In actual practice, however, it is not usually possible to invest the annual instalments set aside for the accumulation of sinking funds at as good a rate as that at which the loan was issued, thus slightly increasing the cost of the sinking fund method over the annuity method and making it the most expensive of the three.

The sinking fund method bears equally upon the taxation or revenue of each year of the repayment period; and, as regards the investor, it is at once more convenient and more equitable than either of the other two methods.

Among the disadvantages of the sinking fund method is its exceeding complexity. The principal feature of such a fund is the provision out of the revenue of an equal annual instalment to be set aside and accumulated for a prescribed period at a rate per cent to be fixed in anticipation, with as near an approach to accuracy as can be obtained. In the case of loans with long repayment periods this is very difficult, and it therefore becomes necessary to compare the actual amount in the fund periodically with the calculated amount which should be in the fund as shown by the pro forma account. Besides the disadvantage of the complexity of the sinking fund calculations, is the more disastrous possibility of not having sufficient accumulations at the close of the repayment period to pay off the debt.

This situation may arise by reason of error in the original calculation of the annual instalments necessary, or error in the estimate of the rate per cent at which the accumulations can be invested, or may be due to neglect on the part

of the proper officials to set aside the necessary annual amounts to the sinking fund. Judging by the experience of Massachusetts, sinking funds have failed of their purpose in the hands of public officials and are there no longer tolerated.

The Instalment Method.

The principal objection that might be raised to the instalment method is that it does not provide for equal annual requirements from revenue, but even the fact that under this method the payments are heaviest in the earlier years and lightest in the later years has been felt in some communities to be a decided advantage.

The serial or instalment method of paying debt, not only obviates the administrative requirements of the sinking fund method, but is actually cheaper (Examples 1 and 3) than the latter, and it, therefore, imposes a lighter burden upon the taxpayer, in the long run. It is important to note that the payment of debt by the instalment method involves annual payments and that therefore it is not permissible on the part of officials to omit making a payment in any one year of the series, nor can the first payment on a serial loan be properly postponed to a date later than one year from the date of issue of the loan. Not the least of the advantages of the instalment method is the fact that the operation is so simple that the ordinary citizen can understand it.

The serial loan thus proves itself to be not only the most economical method, but the burden of repayment is well distributed and the possible embarrassment of the community at the time for repayment of debt is obviated. More and more the idea is growing that communities should pay their debts as soon as possible, for experience has proved that the taxpayers of each generation have sufficient burdens of their own without being obliged to carry those of their predecessors.

Transition to the County Unit Plan of School Control

Some of the Problems That Will Arise Where County Control Is to Supersede District or Township Control

Chas. A Wagner, Commissioner of Education of Delaware

For purposes of this discussion I shall assume that educators admit the theoretical advantages of the county unit of school control, as these have been established by Cubberly, Monahan, Focht, Knorr and others. This will save time and space. Granted the theoretical advantage, however, and we face the practical problem, "How shall the transition from our present system to the county unit system be effected?"

Two sets of conditions must obviously be met: the single district unit and the township unit. The process of transition from either is difficult, of course, but probably more difficult from the township unit. In the first place, the township unit has reached a high degree of development, so that today we are securing very nearly the best results possible under it, results like those of the county unit in kind, only lesser in degree. While this is true of the township unit, the county unit has not had an equal degree of development toward its best possibilities, since most county unit systems are such in name only, and have been tried with less than the necessary grants of power and authority. Thus we have the best possible results under the township system used in a comparison with the poorest results of the county system. The failings of these nominal county units should not be charged against the county unit system, any more than your merchant should charge your neighbor's bill to your account. Rather should

the better results from the perfected township system whet the appetite for the greater benefits obtainable from the county unit system. The strength of the township system lies in the fact that it secures to a limited degree the same benefits that the county unit system will secure, and it reduces considerably the worst evils of the single district system. Because of these two facts the township system makes a very strong appeal for itself, but this truth must be borne in mind very carefully in weighing the advantages of the township system over against the county unit system. These considerations practically dispose of the district system in theory, and leave it only as a condition to be gotten rid of.

The Problems of Method.

If we suppose, therefore, that both the district and the township unit may theoretically be regarded as less desirable than the county unit, what is the next step? That is, the theory of the county unit having been made strong enough to convince the educator who is seeking for something better than either the district or township unit, how shall desire to do something be gratified? Having elaborated a theory of the county unit, what shall we do next? Is not the next logical step to formulate a theory of method to effect the transition? This certainly is the practical requirement, this is the problem the practical school leader must face. In this gen-

eral problem there are three separate problems which at once differentiate themselves, namely:

1. To secure a county board of directors with adequate powers, non-political, practically continuous in its life and policies.
2. To secure the transfer and ownership of all school properties and debts from the boards in the present smaller units to the county board.
3. To decide upon the exclusion of towns or cities from the county unit.

Opposed to the county board with requisite powers will be prejudices of all kinds, ignorance, sentiment for local self-government and other hallucinations, self-interest of those who are beneficiaries of "things as they are," and the apathetic lament "it was good enough for us and should do for our children." To overcome these forms of opposition and others like them, the only sure weapon is education of the community. A campaign carried on thru the press and from other forums, but especially thru Parents' Associations and Parents' Meetings, is sure to lead to the desired and right result. Such associations first carefully organized, then used as the means of dissemination of the ideas, then united and combined to nucleate the public opinion that will demand the change and support it after it has been organized, is the only irresistible force which can be evoked in a democracy for the accomplishment of such a purpose.

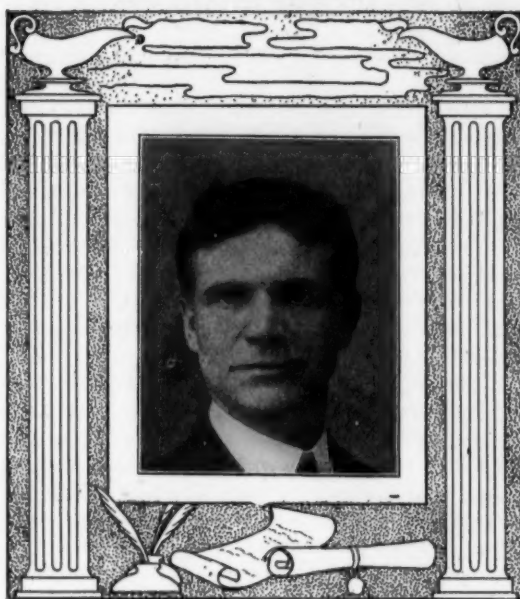
Creating Public Sentiment.

The creation of this intelligent public opinion and desire, and the steady circulation of the fact that it is now forming, now growing, now rapidly increasing, now irresistible, so that political leaders shall not fail to know of its existence, of its prevalence and extension, shall not fail to be made aware of its intention and inner tension, all this work must precede the necessary legislation. Legislation will be needed, especially where district units predominate, but the creation of sentiment, desire for the new, dissatisfaction with the old, must come first. This step is the necessary first one for the educational leader who would like to supplant the many disappointments and dissatisfactions of the district system or the fewer shortcomings of the township system for the county-unit system. In a district system the change may be wrought in from five to fifteen years; in a township system, the time requirement will probably be longer, since the forces against change in a township system are just as many in number and are much more coherently bound together by a class consciousness. That is, the advantages of the county unit system over the township unit system are not so numerous in kind nor so much greater in degree that the contrast will make a very strong appeal to the non-professional. The time estimates may be wrong, but the order of steps is surely right, if democratic government is government of the people by the people. When public opinion will support the demand for a county board, it will also support the grant of the necessary powers to that board. To prepare for the first step, therefore, organize the communities to be affected by the change, inform them to the level of intelligence that makes possible a "common conception in a common consciousness," thence awaken the common desire, thence develop the common purpose. This is efficient and also "triumphant" democracy, at the same time that it leads to the county unit of school control.

The County Board.

The county board has been very ably and very completely discussed by the authors already mentioned. The caution that this board be non-political cannot be too often nor too strongly reiterated. The report upon the Maryland investigation sustains this statement. To be elected by the people, on a non-partisan basis, it may be necessary to hold the election at a time different and separate from the regular county and state elections. If the expense of this plan be objectionable, the inclusion of the county school commissioners in a separate space on the regular ticket, without party designation, is a possibility, tho not so desirable as separate election. In states where school elections are now separate, it will be better to continue them so for a time at least, so that non-partisanship in school matters shall become the universal belief and desire.

The second problem in the transition, tho the very first problem to confront a new county board, is the method of transfer of ownership and control of school property from the present boards or committees to the county board. This transfer must secure substantial equity to the districts and must also secure absolute security to holders of bonds for debts of districts or townships. Morals and law impose these obligations. Under the powers given to the county board should be that of levying a separate building tax each year. Using this power, the county board could impose a relatively high building tax on the districts, or on the property holders of the districts, as an initial building tax to start the new system. After the amount of this new building tax has been imposed, the county board could credit over against this charge, the old school building then standing and in use



DR. J. G. CRABBE,
President-elect Colorado State Normal School,
Gunnison, Colo.

by the district. Thus no district would have to pay an initial building tax, and yet its property is not taken from it ruthlessly and without consideration.

Complications of Transferring Property.

It might be permissible also for the county board to take these school properties just as if they had been state property. All debts outstanding by the districts must of course be assumed by the county board. Whether or not the county board could impose a special tax, to be paid in equal annual installments by districts that turn over a building and a debt, is a question that will be differently answered in different states. Inasmuch as each community keeps the property and uses it just as before, it is argued by some that forms of district organization be continued after the act of merging into the county unit has taken place, so that the debts of districts may be paid by themselves. It seems better policy to view the institution of the county unit as the entrance upon the broader policy of pooling obligations and resources from the very first. This is the spirit of the change, and it should be applied from the very beginning. He who would hesitate because apparently a few districts might get their debts paid, still lacks the vision that the change is made for the good of all.

When the actual attempt is made to prepare the necessary laws to secure this transfer of school properties, many complications arise, of course. No discussion could possibly anticipate many of them. It is certain, however, that voluntary transfer to the county board by the local board is not to be trusted, since the change will embitter some persons so that any and every form of obstruction will be resorted to. Hence to forestall such obstruction, the spirit and form of equity and legality must be maintained. Several other methods of transfer of ownership and control have been proposed to the writer, but only those which prominent lawyers of his state have approved are here mentioned. It is worth repeating that each state will have its own problem here, but the principle that the imposition of a special building tax creates an obligation of the district to the county board. That the acceptance of the existing school building in payment of that tax discharges this obligation seems sound. Upon this principle all authorities consulted have agreed as feasible and practicable.

The Independent Districts.

In organizing under the new county board, our third problem arises: Which cities or towns shall be excluded from the county board's direc-

tion and operation? "Cities that are large enough," we are told by one of the authorities. Teaching force, range of courses of study, and supervisory force, seem to have been selected as the differentiating elements. These elements measure what a community is willing to do for its children, and the plan was based on "the desire to permit those communities that do most for their children the greatest liberty." In practice such a discrimination may be workable, but it will generally be felt to be purely arbitrary. A principle of discrimination must be found to whose validity every reasonable person will subscribe. That principle must contain not merely the idea of "most liberty for those communities that do most for their children," in which two mosts leave room for endless disagreement and bickering and strife; it must contain the elements of worth or value whose attainment was the purpose of the change, namely, better school advantages for all. Therefore towns or cities which can and will give its children better advantages than the county can give, may be left free to afford those, and may be constituted independent units, so to continue as long as they continue these better advantages.

Teaching force, courses of study, length of term, variety of facilities, supervisory force, and some other elements must be standardized in the county, under the county board. Districts that independently of the county board will afford their children opportunities and advantages higher and better than the county supplies, must be left to do this, for a time at least, altho it is conceivable that even this desire for separateness may gradually vanish. Districts that do less than the county standard may not be allowed separate and independent existence and operation, since they are defeating the purpose of the union under the county board. Hence to say cities or systems employing 25 teachers, and so on, will not do. The exclusion must be based upon ability and willingness to exceed the county standard of excellence. The right to decide this must of course inhere in the county board, which must retain supreme authority in certain matters even over the cities or towns left independent for operation of the schools.

A Full Step vs. a Half Step.

It may not be amiss to repeat a caution here that was only intimated in earlier paragraphs of this article—namely, consolidation of district or of township schools is hardly a direct movement toward the county unit. Consolidation of schools is the proper work of a county board, so that the right kind of consolidation may be made. Consolidation which does not regard the county as the unit whose territory is being consolidated, will surely lead to combination and consolidation that is not the best obtainable. A county board alone can attain that end. Consolidation under a township system may and does seem like a step toward the county unit. The chances are that the result is to set up a force that will oppose the adoption of the county unit. All the hindrances, oppositions, objections already named as opposing the county unit when existing conditions are merely district or township systems, will be present and will exert a much stronger opposition after consolidation than before consolidation, by as much as the interests are larger after consolidation, affect more children and more people, by as much as the common consciousness is more evenly and more widely diffused, by as much as the solidarity of aims and interests is more fully realized and more highly prized. This consideration is advanced for the benefit of persons who are working hard for consolidation in township systems, believing that it is a necessary intermediate stage. Its intermediacy may

(Concluded on Page 82)

Progress in School Administration in Portland

R. H. Thomas, Clerk of the Board of Education, Portland

March 1, 1891, which welcomed the birth of the *AMERICAN SCHOOL BOARD JOURNAL*, was the birthday of the fiscal year of the schools of Portland, Oregon. The directors that day announced that scholarship had been raised; discipline improved; and criticism that school management was becoming an end instead of a means, had been met by revision of rules and minimization of formidable examinations. They employed one superintendent, seven janitors, and 88 teachers, which latter they write, were mostly loyal. There were 4,043 students in attendance on the 27th day of the previous month—an increase of 381 over that date the year previous. The experiment of a night school had been "encouraging"; one teacher had taught the session thru, and one student had attended 95 evenings. Re-arrangement of sub-district lines were discussed at length, tho no thought was given to school organization in case of the possible consolidation of the cities of Portland, East Portland, and Albina, as it could not be determined "whether consolidation will ever take place."

The superintendent gave textually the report of the prize-awarding committee on the writing of pupils as shown in copy books. This committee believed that "if prize giving were continued for a few years, it would result in much good." She felt the children would never forget the day in the spring of 1891, when they saw in Portland a real live president of the United States, whoever he was.

Also some business matters were mentioned. The directors had purchased "an entire block of ground 200 feet by 230 feet," and now owned six and one-half blocks upon which were "seven spacious buildings"; one had four rooms—two of which were finished, and one occupied. The bonded debt was \$60,000. The sum of \$243.02 had been spent for 170 new books and the repair of fifteen old ones. The year had disbursed \$167,948.87, of which \$11.15 went for janitors' supplies. Mostly, the money had been raised by a four and one-fourth mill levy upon an assessed valuation of \$18,400,000.

That was 25 years ago. Note the present figures: Portland, East Portland, Albina, St. Johns, Linnton, Sellwood, and many others make the greater Portland, and the school district has outside the city, \$2,652,080 in assessed taxable valuation; 76 school sites averaging 96,298 square feet and totaling 168.01 acres; worth \$2,450,845; schoolhouses under a straight line physical depreciation and economic de-valuation show on the district's ledger at \$4,302,792. There is a partially inherited, bonded debt of \$848,500 with a sinking fund of \$161,277. This sinking fund is growing \$54,500 each year, which is rapid enough to retire all bonds at the end of ten years. No Portland school bond has ever run over ten years. Eleven hundred and seven teachers come and go. Last year \$2,727,947.32 came and went, of which \$5,293.52 went into janitor supplies. The revenue was mostly raised by a 6.6 mill levy on \$305,658,090 taxable assessment.

Using 1891 as a basis, Portland schools have increased in number, from seven to 76, 986 per cent; the average school site, from 37,143 square feet to 96,298 square feet, 159 per cent; the number of teachers, from 88 to 1,107, 1,158 per cent; the bonded debt, from \$60,000 to \$848,500, 1,314 per cent; the taxable assessment, from \$18,400,000 to \$305,658,090, 1,561 per cent; the cost per pupil, from \$27.29 to \$47.64, 74.6 per cent.

With all the purchases of properties and supplies and equipment; with all the construction

of buildings and additions and betterments; with all requirements of upkeep and operation, and maintenance of physical plants; with all the contracts with teachers and mechanics and builders; with all the insurance and elections and census enumerations; with all the budgets and legislation and financial problems; with all the records and disbursements and business demands, is it any wonder that attention to non-educational matters outgrew the time a non-salaried director could gratuitously devote to a community? Is it any wonder that the director ceased to carry a requisition book in his pocket, and discontinued measuring wood, and left off inspecting burned-out furnace grates; and that the board relied more and more upon the school clerk as their business executive?

Some particulars of the larger improvements in this business end of school management, over this period of two and one-half decades, are here indicated.

One is the gradual adoption of business methods as used by commercial enterprises insofar as they can be adopted by a municipality. With system, much is possible—without it, much is improbable. Work has been segregated under four bureau heads, which conveniently satisfies local requirements. They are,

Bureau of Records: caring for census, elections, board matters, correspondence.

Bureau of Accounts: covering claims, contracts, banking, accounting.

Bureau of Purchases: including storeroom, supplies, deliveries, purchases.

Bureau of Properties: embracing construction, repairs, operation, and maintenance of buildings and grounds.

The division is both efficiently simple, and simply efficient. Any simple system carefully supervised, works more quickly and economically than too much system.

Another improvement is in the plan of levying taxes. In 1891 the school district maintained its own assessment rolls; so did the city; also the county. What a practice! As many assessors as tax levying bodies; and as many valuations; and as many tax collectors' windows. The school district early made application to the legislature and the law was modified. Only the county assessor now assesses, and only the county sheriff collects.

The last special school tax levy was made by the directors. All previous had been made by the legal school voters in annual session. No

other large public enterprise in the state depended upon the old New England town meeting. Just think! A city population of 277,000 attempting to vote viva voce upon a \$2,000,000 school tax levy. Meetings were packed to secure endorsement of propositions, schemes to reduce taxation, and combinations of neighborhoods, so each could get something its heart craved. As a business proposition, the act of the legislature has discontinued a method which might possibly have led us far afield.

The budget system obtains in Portland. For small systems, estimate "guesses" might do, but not with large ones. Guesses are seldom accurate. Even scientific forecasts are not infallible. But budgets need no panegyric. I merely mention them as they came to us within the last 25 years.

Note the following items—each or several found in some school building in Portland, in 1891.

Windows—High and narrow, and on every outside wall of the room. The common sight must have been youngsters in cross lights and in dark corners and in spectacles.

Toilets—Open vaults under seats filled with several barrels of water, emptied into the sewer once every day or so.

Basements—Very few cement floors, mostly earth floors, or unventilated wooden ones with their attendant germs, vermin and decay.

Plumbing—A few sinks where the children bathed faces in cold water and drank from tin cups. So far, I have never heard of anyone who ever heard of a school tin cup being washed.

Heating System—Largely stoves with the usual litter about the wood boxes.

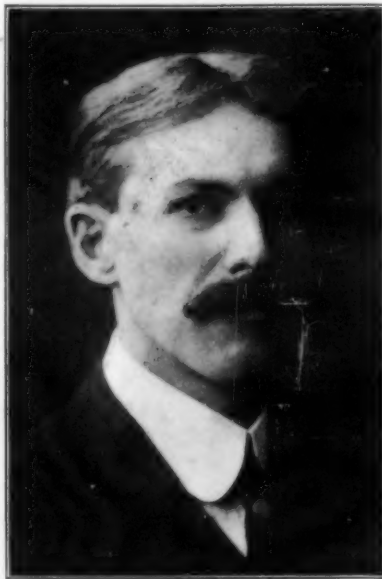
Perhaps these things were no better at that time, in other cities of equal age with Portland, but the grass has many years been growing on the graves of the foregoing items in Portland. Portland has always tried to keep pace with the best and has not infrequently excelled. Architects now study for light perfection, safety, sanitation, economic efficiency in operation, architectural adaptation in form, proportion and appearance, and economy in upkeep. Experts correct, in advance, matters which might permit property damage or personal injury.

In 1891, school grounds were mostly undrained and unimproved. There were some plank walks and some mud puddles. I recall no grass areas, and no prepared play areas. Nineteen sixteen finds no unsanitary school yard in Portland. Some playsheds are built; all play spaces are well prepared and protected; the angles and corners not easily used for play purposes are filled with lawns, or shrubs or trees. Concrete walks and drives surround the permanent buildings, and the well kept school properties set a fine example to the community, of which the law makes it the civic center. The school board has created for itself, a school beautifying committee, which passes upon the pictures and the statuary and the other esthetic expenditures of the board or the individual schools, for both interior and exterior. Such a committee would have faced an herculean task 25 years ago. Today in every school yard "For You a Rose in Portland Grows."

As a fire hazard, experts pronounce Portland schools exceptionally fine. I once asked the city council to place a fire hydrant and a fire alarm box in front of each building. One request was all. It was promptly done so far as possible. City councils are always humanly interested in children.

When a new site is secured, a considerable area is purchased, upon which is placed a one-

(Continued on Page 93)



R. H. THOMAS,
School Clerk,
Portland, Oregon.

MECHANICAL EQUIPMENT OF SCHOOLS

Harold L. Alt, M. E.

(Part XIV—"The School Power Plant.")

Few school boards realize the economy of a school power plant and fewer still adopt the idea even after being convinced. The reasons for this will appear later, but regardless of the variety of objections often urged against such installations, their desirability is beyond question in many cases.

It must be understood at the start that a power plant consists of boilers, engines, generators, feed water heaters and the other apparatus necessary to produce electric current sufficient for the needs of the school. With such current available, it should be used for any and all purposes wherever necessary in order to secure the maximum advantages at minimum cost.

Electric current for motors, lights, experiments, etc., is daily becoming a greater and greater necessity in the modern school building. As an example of this it may be said that one of the new Pittsburgh High Schools uses for ventilation alone some 23 fans, several of which require motors from 30 to 50 horsepower each. Having once installed a power plant, current in any reasonable amount can be generated for school use at little or no additional expense.

This is explained in the following manner: Steam must be generated to heat the building in any event and to produce this required amount of steam a given amount of coal must be consumed. Now if this steam is raised to 60 lbs. or 100 lbs. pressure (instead of only the 5 pounds usually carried on low pressure heating systems) there is a tremendous amount of energy available which can be turned into electric power by passing the steam thru an engine connected to a generator with a loss of only a very small portion of the heating capacity of the steam. After passing thru the engine about 95 per cent of the original heating value of the steam is available in the exhaust steam, at 5 pounds pressure, for heating the building.

The steam required for heating is usually so far in excess of the amount required for power that little if any additional steam is ever needed for power purposes, except on warm days in the spring and fall when no heat is required. At these times the steam required for power must be produced for this special purpose and, instead of being turned into the heating system is thrown out thru the free exhaust pipe. Were it not for this waste in warm weather, power could be produced even more profitably than at present.

Some one in making a comparison of the cost of buying current from a lighting company and producing current on the premises combined with using the exhaust steam for heating, has deduced the fact that even if the lighting company could produce its current free of charge the cost of distribution alone is sufficiently high as to make a private plant cheaper. This statement however, must be limited in its application to large consumers and to districts not immediately adjacent to large central power stations.

There need be no concern for the safety of a high pressure plant in a public building, such as a schoolhouse. There is no reason to rule against a plant in this particular. Almost all large office buildings, large department stores and the large majority of manufacturing establishments own and daily operate plants of exactly this description. High pressure can be, and is, made as safe as low pressure, while greater and more numerous safeguards are installed to prevent even the possibility of accident.

As to cost: The average school can make all the changes necessary to install a plant at a

cost approximating \$10,000.00. The fixed interest charge on this amount will be about \$500 per year to which must be added depreciation, repairs, extra coal, attendance, etc. The amount of depreciation is usually considered as about 5 per cent per annum and the upkeep about 2 per cent which gives some 12 per cent (counting fixed interest charges) of the initial investment to be charged up to the cost of running the plant each year. There will also be some additional coal used to supply power only, during the warmer days of the late spring and early fall. Just how much this would amount to is problematical depending on the season, amount of power used, fireman, etc. It would probably be fair to assume about 90 to 100 tons might be used costing perhaps some \$400 to \$500. Additional labor in the boiler and engine room might cost another \$400 and engine room supplies such as oil, waste, etc., about \$100.

From this it can be seen that a plant costing \$10,000 initially would require

10,000 x 12% equals \$1,200 fixed charges
500 additional coal
400 additional labor
100 miscellaneous

\$2,200 total operating cost per year,

or a monthly average for ten months of about \$225. Just at the present owing to the abnormally high prices, the initial cost of a plant might, and probably would, somewhat exceed the above estimate but this would affect the yearly operating cost but little especially when distributed over ten months during the year. The modern high school, however, has but little difficulty in running up an electric bill of \$600 to \$1,200 per month depending on the rate paid,

amount of night school, and minimum rates for summer use when the school is not in session.

The economy of school power plants may perhaps be understood better thru a description of a typical power plant installed in 1915 in a high school in an Eastern city. This plant has given the utmost satisfaction to the board in charge. The original intention was not to install a plant but on the contrary to construct a swimming pool. Tentative estimates on the cost of the pool and of its operation caused the board of education to abandon the proposed plans. The space was very conveniently turned into an engine room when the board realized that an annual saving of more than \$1,500 could be made by such an arrangement.

It is always well in installing low pressure heating plants to provide (as was done in this case) boilers designed to stand high pressure so that power can be generated in them later if desired. The additional cost of such boilers is not much, and their usefulness for possible future power purposes is desirable. For this reason cast iron boilers are not well suited for large schools where power may be desired later. Cast iron boilers cannot safely carry high steam pressure under any condition.

In the particular case referred to, two generating units were installed, one of 50 kilowatt and the other of 75 kilowatt capacity. One of these units can be run in case the other breaks down, but the larger unit must be utilized when the auditorium is used at the same time as the classrooms. This condition is, of course, very rare.

The three boilers shown in the plan in Fig. 124, supply steam to a high pressure header running across the boilers near the front. From this header all steam is taken; the branch at the right hand end goes thru the wall into the

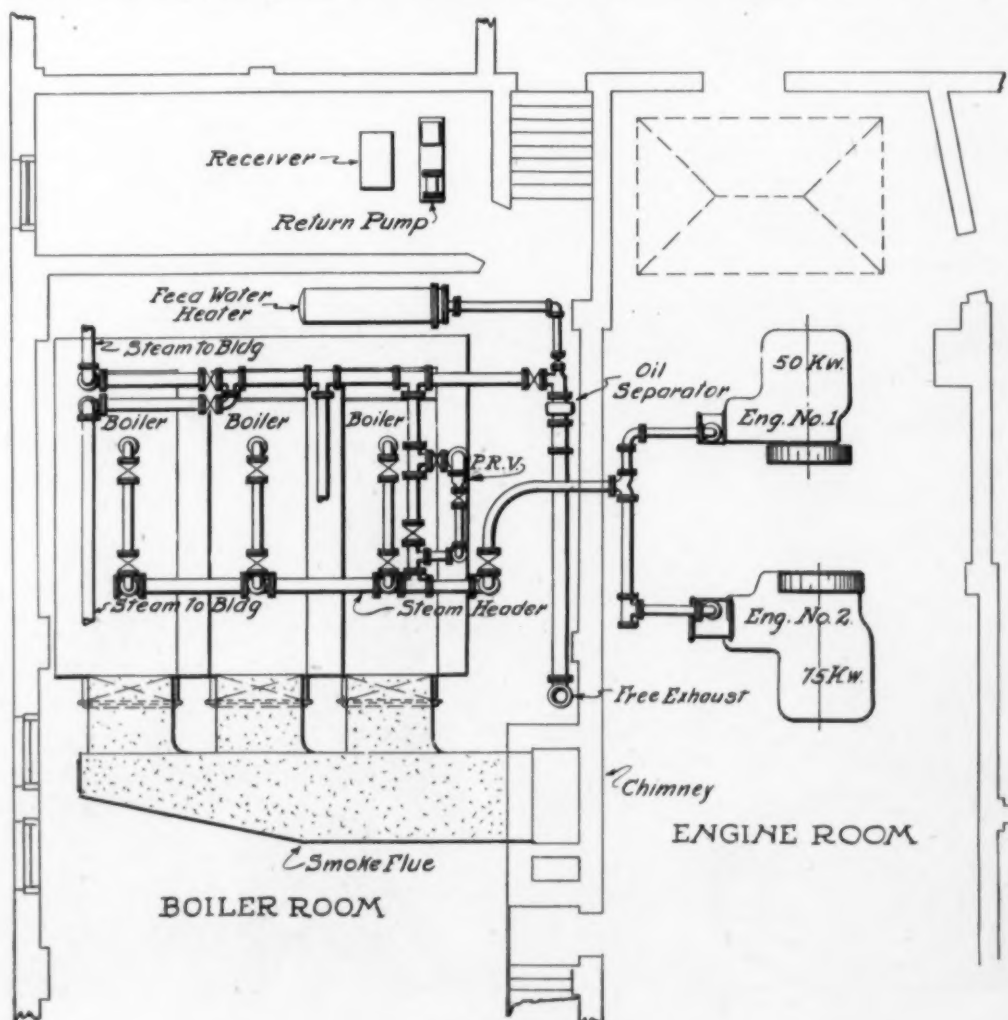


Fig. 124.

engine room and supplies the two engines. Just to the left and in front of the boiler connection is a steam connection, passing thru a pressure reducing valve PRV and into the header extending across the back of the boilers. From this all steam for heating the building is taken. A branch from this header also supplies steam to the feed water heater.

To understand the free exhaust and oil separator, the plan shown in Fig. 125 must be re-

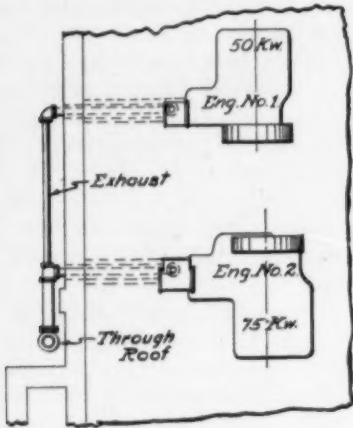


Fig. 125.

ferred to and the path of the exhaust must be followed. This exhaust pipe is laid in a trench underneath the floor to a vertical riser, marked "Thru the Roof." The exhaust steam is carried from the engines into the exhaust to the vertical

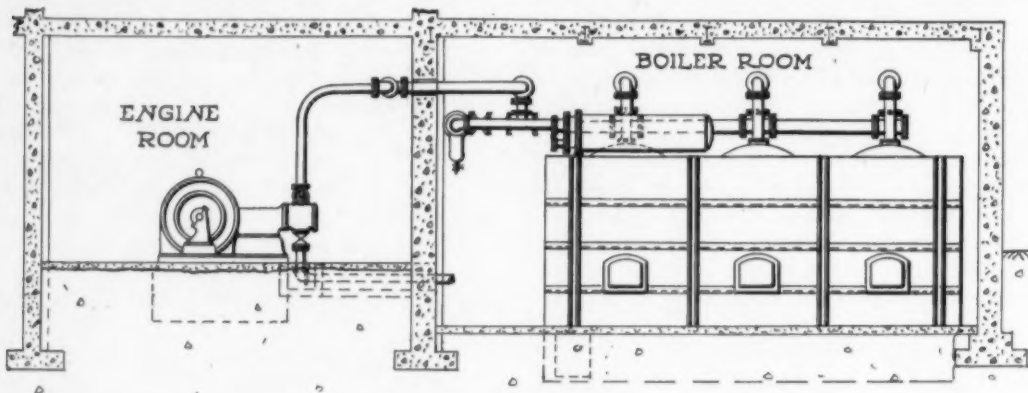


Fig. 127.

riser. At the ceiling this riser has a branch going thru an oil separator into the heating system. In warm weather the exhaust steam enters a second branch thru a back pressure valve directly to the outside air. The method of pipe arrangement is shown in Fig. 126, which is an

elevation of the riser with the branch to the oil separator and the extension of the riser to the exhaust head on the roof.

A cross section thru the boilers and engine room is shown in Fig. 127. This view also indicates how the exhaust pipe is carried under the engine room floor.

After completion, this plant was carefully tested out and has since given every satisfaction.

In this school the boilers were installed before the final decision was made by the board to install a plant. Owing to the foresight of the engineers these boilers were, luckily, capable of carrying high pressure so that the changes were limited to the installation of engines, piping, feed water heater, etc. The plant is saving close to more than \$1,500 (in some years nearly \$2,000) per year which is equal to a 20 per cent interest rate on the investment of \$10,000. Of course some extra coal, attendance, oil, etc., are required but these are not sufficient to seriously impair the good showing made.

Objection to a school plant is sometimes urged on the basis of dirt and noise. Both of these charges are unfair to properly designed plants. Many engines are so well built and carefully balanced that a person standing just outside of the engine room door cannot tell whether they are in operation or not. So far as dirt is concerned, the engine room is far cleaner than any boiler room. This may be readily seen from the two views accompanying this article. Fig.

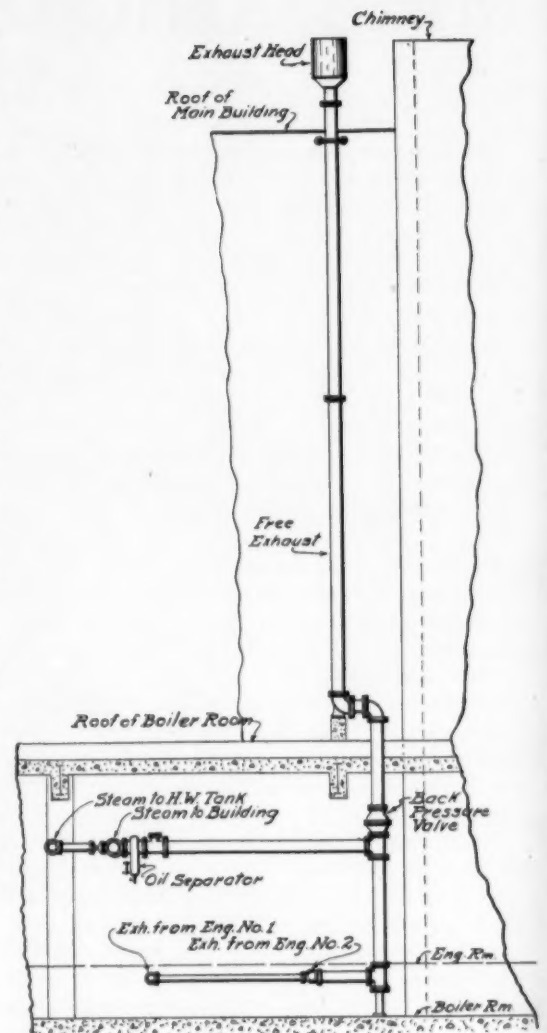


Fig. 126.

of power for the operation of a small motor or a few lights. In the building described it was desired to run the house pump—which supplied water to the tank on the roof—during the summer and also to furnish light to the offices occupied by the school board and administrative officers. For this purpose a gas engine of 9½ horsepower, operating a 7½ kilowatt generator, is used as an emergency. It is run only for small power requirements when the main plant is not in operation. A view of this equipment including the house pump is shown in Fig. 130.

There are several reasons why schools which are large power consumers should be built so as to make the installation of a plant possible:

First—A school, capable of economically installing its own plant so as to compete with the

(Continued on Page 94)

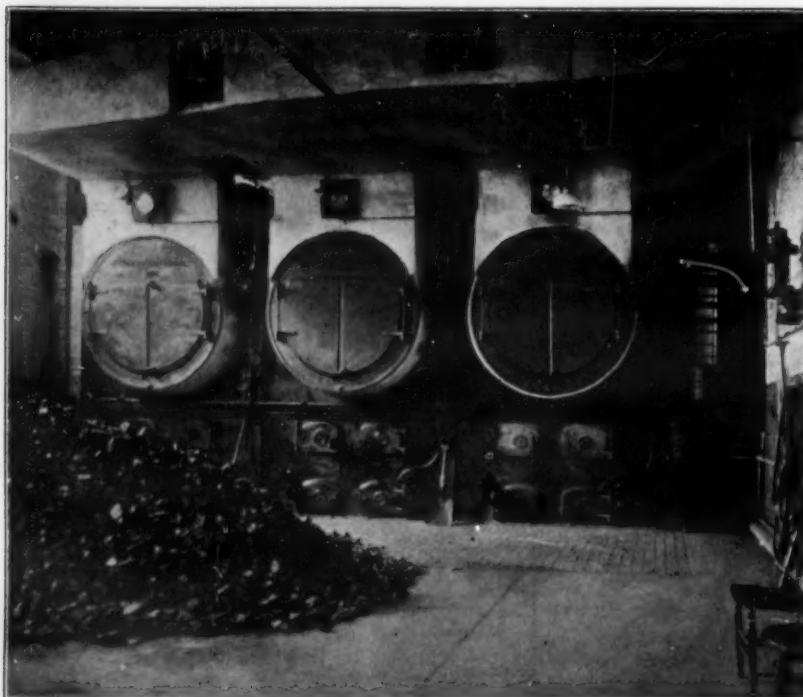


Fig. 128.

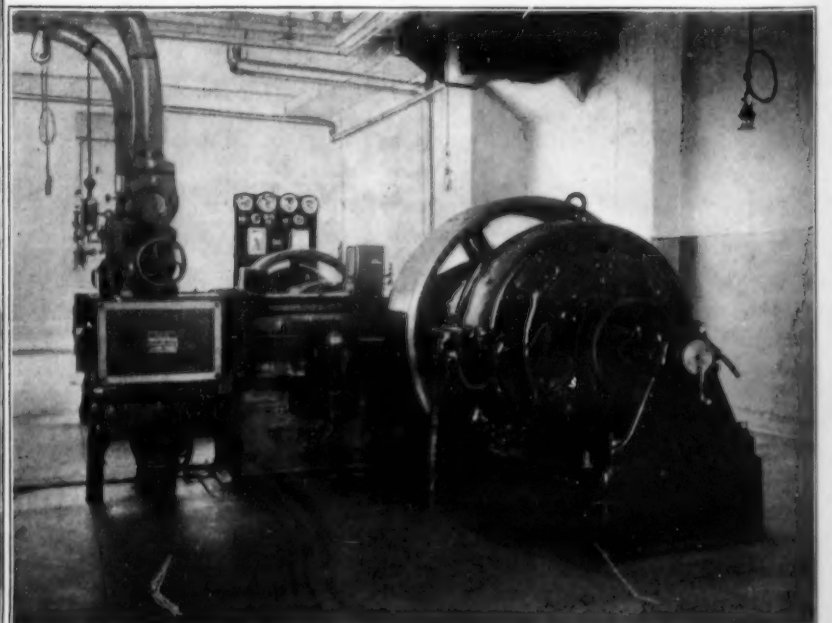


Fig. 129.

Some Defects of Public School Administration

Ernest W. Robinson, Supt. Webster-Dudley School Union, Webster, Mass.

Finance and School Accounting.

The state recognizing the importance of this department of school activities has enacted legislation which requires that the superintendent of schools shall assist in the copying of records and accounts and making an annual report.

There have been two results of this wise legislation, one, a very noticeable improvement in local school accounting, which hitherto had been at sixes and sevens thruout the state, especially in the smaller towns and cities; and a second, in the drawing closer of the boards and their executive agents, in the important matter of deliberating together on methods of school expenditure, and on questions of the annual budget. These are important gains, working directly and indirectly for more efficient understanding and management, by school boards and superintendents, of the financial operation of their respective school system.

One writer has put it concisely when, in speaking of the great importance of the financial phase of school management, he declares, "If the financial side of the ordinary business enterprise requires prudent, clear-headed thinking, the managers of schools should surely be prudent and capable men, for some of the most important and difficult duties of the school board consist in providing and distributing sufficient revenues to insure educational advantages to the children of the community."

The introduction of the superintendent into the financial department as an assistant, has been of aid to him in the development of a business sense if he had had no previous aptitude for business, and it has also relieved many committees of much drudgery and enlightened them considerably on general as well as local matters of financial operations. Experience has shown in small as well as in large school systems, the imperative need of systematic accounting if the members of the school board or the superintendent himself are to know just how school finances stand at any given moment. The utilization of sufficient fixed forms to make possible the classification of the chief elements of accounting, is being increasingly recognized, as an important principle of safety, clearness and economy of financial and material operation in school management. Among these forms should be:¹²

1. The payroll with place for salary rate, absence, names, etc.
2. The monthly financial summary by departments.
3. Book inventory by schools, showing where every book in the system is, and what condition it is in at the time of report.
4. Supply requisition blank, covering general school needs.
5. Individual school annual expense account, salaries, supplies, fuel, repairs, equipment, etc.
6. Annual summary blanks for register, containing professional, attendance, and material data from each school, for school year.
7. Monthly attendance, and truancy records.
8. Monthly educational progress record.
9. Printed rules and regulations.
10. Definite Course of Study.

That the fitness of the superintendent is to be of great service in this department on account of his intimate knowledge of details is obvious. Yet two instances may illustrate the difficulties which can arise when any members of the school system attempt work requiring special detailed knowledge.

Note—This article is the concluding installment of an important series discussing in detail, the functions and relations of school boards and superintendents. The author is a schoolman of long experience and wide knowledge in school administration. He uses Massachusetts laws as the basis for his discussions.—Editor.

For many years a certain board had managed in some miraculous fashion to have its accounts accepted annually by local auditors. Since the books were kept in a very unbusinesslike manner, regularly increasing amounts of bills payable anywhere from September to December were invariably pushed over into the following fiscal year for payment. The superintendent was helpless, having at that time no authority to question any procedure of such a sort in this department; he found the opportunity at length toward the close of one fiscal year, to advise the board to ask for sufficient funds from the town to take care of the mass of hold-over bills as well as to carry the schools thruout the entire following year and pay all the bills. The suggestion was approved and considered a good one to think over till another regular meeting, the superintendent being requested to bring in at that time a detailed statement of needs of departments, this being the first time that such a method had ever been used in making up the annual budget. In the meantime the chairman of the board, a conservative, rather timid man, being questioned by the town clerk as to the amount to be asked for by the school committee in the forthcoming annual warrant, forgot his function, lost his nerve and said, "I guess the same as last year."

At the next regular meeting the board in due time asked for the superintendent's report which consisted of very definite detailed statements of needs together with a systematic method of estimating and providing for them. The report was accepted and the motion to ask for the amount required was about to be put when the chairman, who had been manifestly growing very uneasy during the discussion, finally stated that such action was useless as the estimate for the following year was already printed. Being pressed for explanation for the authority for this action he acknowledged that he had taken things into his own hands as he feared that the proposed changes were too radical to be accepted, or to be safely operated.

Naturally nothing more could be done on this particular matter, but a vote was passed then and there that in the future all financial demands should be made up at a regular meeting and that such estimates should be passed on detailed statements furnished by the superintendent of schools.

The following year school funds gave out in October and the usual large number of bills increased considerably more. Estimates for the following year were made in regular meeting and amounted to many thousands more than had been used during the current year. At the following town meeting that school committee had the time of its life answering criticisms that were hurled at it. The methods of accounting, the laxity of procedure, the poor judgment displayed, all were pilloried and flayed by caustic critics. The moral was made clear to that board to use to advantage the detailed knowledge of the superintendent in this department and accept his judgment of the method of procedure. That this is a very vital phase of school activity may be seen by the following quotation from Dr. Elliott's "Some fiscal aspects of Education." . . . "Since the school department, as all others is run not by machinery, but by men, is there not here a particularly fitting opportunity

for a capable business executive to be of service to the town or city by wise recommendations and economical action?"

In another instance one member of a certain board had been for years an expert accountant and accordingly decided upon his entry to the board and election as secretary to show folks how things should be done in this department. By law the superintendent had been practically created the assistant secretary to the board. His services were waved aside in a gentle but firm manner.

When however, the annual returns to the State Board of Education had been twice sent back to our expert accountant for much explanation and correction he turned them savagely over to the superintendent with the caustic observation that the State tax could be wisely reduced if the salaries of certain incompetents at the State House were abolished, the said incompetents to fare forth and seek employment at simpler tasks that required no great intelligence in their execution.

It is clear by this illustration that every man should know the details of his regular work, and that the knowledge of details and their interpretation and relation cannot very well be undertaken by anyone not directly engaged in and very familiar with the work of observing local reports.

School Reports.

It would seem that in the preparation of local and annual reports that the superintendent of schools should be considered an expert regarding his own work and general amount of department work of the schools. One instance occurred a few years ago where the majority of a school board decided to expurgate their superintendent's recommendations as presented by him in his annual report, for the reason that, "the report might reflect on them because they had not done the things recommended and further because the superintendent should not write such a long report anyway!" The superintendent naturally objected to this course when he found out purely accidentally at the printing office that a part of his report was to be cut out. He objected as a town officer; the minority member also objected to this expurgation. He refused to sign the majority statement but wrote instead, a scathing report of his own which included the rejected portions of the superintendent's report and criticized the attitude of the majority members for such an unbusinesslike act on their part. At a regular town meeting the minority report was accepted by the town and the majority members' own official report signed by themselves accepted only after a stormy session, and under protest of a large number of citizens. The moral is quite obvious. Do not interfere with a public official's report.

Another instance occurred, where a superintendent some years ago urged strongly the establishment of medical supervision in the schools. He wrote at length on the subject in his annual report. The school committee accepted it as a whole but acting on a suggestion of a member of the board, a physician, this part of the report was not printed. The physician urged that while the idea was right in principle it would cause uncomfortable pressure to suggest such an idea, and would develop a number of office seekers at once. The superintendent's idea was turned down very courteously after a consultation with him. A year or two later medical inspection became compulsory in the public schools. That superintendent always has felt that he was unjustly deprived of an opportunity of genuine

¹²W. S. Sutton: "Functions of Trustees in School Administration." School Board Journal, Oct. '11.

¹³See Appendix for specimen forms.

service to the community and of putting himself on record for progressive administrative ideas in his community. The office of school physician was established by the state later, and the first man to fill it was the member who had objected to publishing the superintendent's recommendations in the matter. Such is the irony of fate. Some school reports which are received in exchange indicate either indifference or lack of pride on the part of superintendents and school boards as to the form in which their reports are presented to their local committee and committees of other towns. Unbusinesslike methods in having them printed are revealed in the type, quality of paper and the great waste of space caused by poor arrangement. Poor taste is shown often in cover design and color. This is poor business on the part of the superintendent or board, chiefly on the part of the superintendent, for the average school board will follow up and support a superintendent who wishes to present his report in compact fashion and who asks for the right of supervising their printing so that they will be presented finally in good form before the committee, and the community.

Some very valuable suggestions as to the best form a school report should take are amply set forth in an excellent text on this subject.¹³ The writers treat of several phases of a typical report. Grouping certain leading questions into classes of occasionally answered, seldom answered, and never answered, an interesting treatment is presented of the following questions of

1. Plant.
2. Receipts and expenditures.
3. Children to be educated.
4. Children enrolled and attending.
5. Description of children attending.
6. Compulsory attendance and truancy.
7. Special classes.
8. Evening schools.
9. Vacation schools and playgrounds.
10. Medical inspection.

One of the authors of this work, Dr. Snedden, writing on the purpose of educational statistics says:

"There can be little doubt, then, that the published school report should be regarded essentially and primarily as a communication from the board of education and the superintendent of schools to the public. It is designed to inform the more intelligent and interested portion of the public as to the status of the schools, and to command hearing and support for the progressive policies of the system of public education. American education is essentially democratic. It relies on the public, not only for support, but for endorsement and encouragement. Without the intelligent co-operation of the public, no school system can long maintain high standards of efficiency, and must largely fail to realize its full usefulness.

"The effort to keep the system close to the people, and the exhibition of conditions, progress, and the results which can and should be made in order to answer the needs of publicity, will in most cases produce the knowledge and feeling of responsibility that most fully contribute to administrative ends. Hence we may safely say that the primary standard for school reports should be effective publicity, remembering that such publicity will, in the long run, also very greatly contribute means and incentives to administrative success. When tested by such standards, what can be said of the published reports of the American cities?

"They answer some of the questions that an intelligent layman might wish to ask, and they provide some of the data for administrative control of the system of administration. Even the best of the reports, however, leave many questions unanswered, and few of them have undertaken to apply modern or scientific statistical methods. Apart from the few best reports, it must be said that the majority of the reports fail conspicuously to provide statistical information either to the layman or to the administrator.

They illustrate a striking phase of inefficiency in American municipal administration."¹⁴

Of course there must continue to exist wide difference in the content of school reports in larger and smaller communities, and in various widely separated sections, but every superintendent can by intensive study of his own community, and extensive observation of the methods of presentation, and matter used in reports of other communities, find incentives to the constant betterment of his annual reports. The constant attempt to report progress will also aid in developing new ways to accomplish it in his school system.

General Control.

The general administrative control of schools involving the establishment of special schools for defectives, over-age pupils, delinquents, etc., the institution of specialized work, vocational, industrial, vocational evening schools, the times and types of promotion, the keeping of health attendance and scholarship and office records, reports of various types, educational correspondence, keeping of school accounts by months, by buildings, by departments; these activities are admitted securely within the provision of the superintendent's professional capacity and training.

In attending to all the duties before enumerated, the average superintendent needs regular clerical help in his office. Most superintendents have such help now as a matter of good business management of their department. Correspondence with them shows that the majority of their replies to letters are almost always dictated and neatly typed, whereby two ends are gained, legibility and duplication of the correspondence for office filing.

Some years ago a superintendent had a visit to his office from the chairman of the school board to whom a *third request*, letter of "information wanted" had been sent from Washington. The chairman asked the superintendent why he did not attend to these things promptly. The superintendent turned to a pile of correspondence stacked upon his desk and informed his visitor that to answer honestly and thoroughly all the information there asked for he would be obliged to spend a large part of his time in the office looking up descriptive data and writing innumerable letters. He added, "There are countless health, school and promotion records I want to copy; there are special studies I would like to make for my annual report; there are a hundred and one things I would like to do in this office but I have not the time to do these things and visit my schools properly." "Then you need a clerk." "Right the first time," replied the superintendent. "If you want me to keep up-to-date, to do my work properly for state and federal authorities, in short, to administer this office as well as you run your own, which is saying a great deal, then you must give me clerical assistance." At first a teacher was engaged to work after school hours and Saturdays. This was not satisfactory as she was busy in her school many times when the superintendent most wanted her services. Next a senior from the commercial department of the High School was employed part time, and later a permanent clerk was appointed who had had good training and possessed good character, judgment and ability.

Today in that office all reports and books received are acknowledged at once, numerous questionnaires answered promptly, and complete records and various classifications are indexed so that every important phase of school activity is available at a moment's notice. The superintendent's annual report is a better educational document. Now that superintendent can give the better part of his time to active work in the

schools, particularly since he has a clear conscience as to the state of his desk in his office. The superintendent's clerk, in every fair-sized community is simply another phase of the evolution of the division of labor, which in earlier days evolved the superintendent from the committee, and the committee from the town meeting.

We have discussed in detail mistakes that have been made, and suggested certain corrective principles for application in the various departments of teachers, salaries, textbooks, repairs, hygienic supervision and control of janitors, new buildings, financial and school accounts, general administrative control and office work. Any committee needs the expert knowledge of a good superintendent to aid it in its educational plans and policies. The superintendent needs the material and moral support of his committee that he may function properly as an educational administrator to the satisfaction of the committee, for the benefit of the community, and for the sake of his own professional pride and sense of honest service. Finally, if the superintendent expects a businesslike attitude of the committee toward him, he must be businesslike with them both in the management of his school board meetings, as well as in the management of the schools between times.

Conclusions.

Certain general truths stand out as a result of this study of school management, which may be summed up as follows:

First. There is a very decided belief that our public school systems are not operated along lines of efficiency, in point of form of organization, internal operation, material management, and harmonious co-operation of the legislative and executive branches of government. This belief, shared by lay and expert critics alike, is summed up by a recent writer in the following words on school waste:¹⁵

"A tremendous waste in the organization of the ordinary public school appears at the first glance to a critic who is seeking to spend the school taxes with the greatest possible benefit to the children and to the taxpayers. The entire school equipment of building, yard, and supplies stands for half of every school day, besides summer vacation and Saturdays.

"The buildings are expensive and for the greater part of the time are not in use at all. This is an extravagance in itself, but when we consider the way in which the average child who goes to school in town or city spends the hours when he is not in school, and the very incomplete education he gets during the school hours, we begin to realize just how serious this extravagance is."

Second. There is encouraging evidence that well-planned and definite corrective agencies are rapidly shaping themselves to overcome very many of the admitted shortcomings of our present educational scheme. Among these may be mentioned the re-organization of elementary and secondary education by the so-called six-and-six plan of grade division, with its intermediate and junior and senior high school sections; the practical development of industrial and vocational arts; kindergarten, open-air, vacation, defective and evening industrial classes; medical inspection, dental hygiene, and the extension of the playground movement; improvement in the quality of teaching and supervision of the schools; the increasing use of public school buildings for local civic, patriotic, social and general educative purposes. These are definite steps forward, and earnest of future growth.

Third. It is very clear that lay control of expert management of the schools is a fruitful source of much undesirable and loss-producing friction between the two types of school managing officials, members of school boards and their executive agents, the superintendent of schools.

¹³"School Reports and School Efficiency." Snedden and Allen.

¹⁴See Appendix for specimen reports.

¹⁵John and Evelyn Dewey; "Schools of Tomorrow." Page 178. (Continued on Page 90)

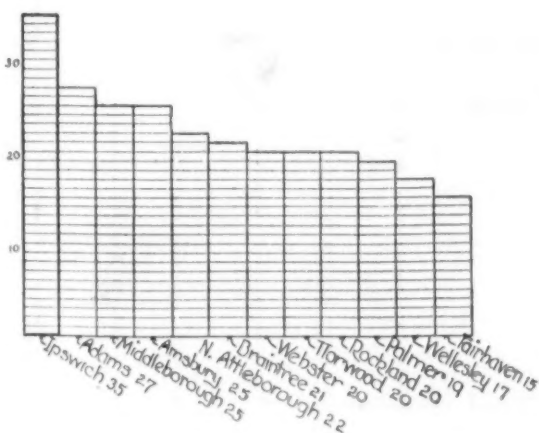
The Content and Arrangement of the Superintendent's Report to the School Board of a Large Town or Small City

Frederick B. Knight, Ipswich, Mass.

As the science of educational administration increases in technical detail, in scope, and in importance it is found of growing helpfulness to compare the educational development of one community with that of others. The medium by which this comparison is most frequently made is the annual reports of the school superintendent. And the comparisons are for the most part made by the superintendents themselves.

The schedule of the superintendent is so full that his time allotment is necessarily small for studying the educational development of other communities. Any attempt which will aid in reducing the time necessary to reading and understanding a school report will be an effort to help at a very vital point. The aim of this paper is to sketch the general outline of a standard superintendent's report. For manifestly a standard arrangement in all superintendents' reports will reduce the time necessary to their study.

COMPARISON OF NUMBER OF PUPILS PER TEACHER IN MANNING HIGH SCHOOL AND ELEVEN MASSACHUSETTS HIGH SCHOOLS OF SIMILAR SIZE.



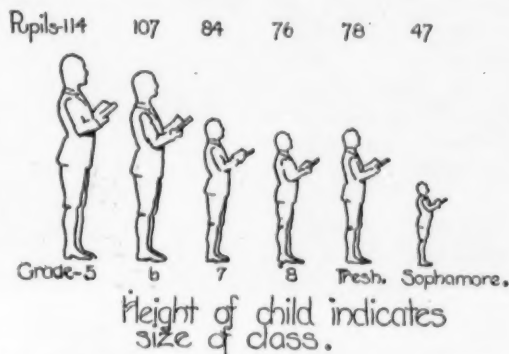
Is it good economy to give a teacher so many pupils that she can give individual attention to none?

If your High School is poorly staffed a Chart will prove it.

I point out first that superintendents' reports as now written show a most confusing variety in arrangement and in subjects covered. There is no apparent agreement among superintendents as to what the aims of a report are, what matter should be incorporated and what material should be excluded. There is no recognized order of treatment. Each superintendent seems to have a method all his own. This lack of standardization is not based on any needs of individual reports. There is no controlling reason for it, and there are evident reasons why a standard arrangement would be more helpful to all concerned.

As proof of this lack of standardization I have analyzed the superintendents' reports of eleven towns and cities. These towns and cities have many common problems. The superintendents would profit by an acquaintance with the year's work and experience in other communities. My analysis of these reports shows however, that this knowledge can be gained by a superintendent only after undue effort. The criteria of this analysis are: first, number of pages in the report; second, use of index; third,

SHOWING HOW A TYPICAL CLASS HAS DIMINISHED IN SIX YEARS.



The Public School is a commercial house selling education to our youth. We are holding less than 50% of our customers. Is this good business? Notice our heavy loss comes between the 6th and 7th grades and between the first and second year in High School, this means that our course of study and our equipment is not meeting the real needs of our customers.

A Chart which argues for smaller classes for the teachers.

use of outside cover; fourth, location of the financial report; fifth, kind of financial report; sixth, the nature and extent of other statistics; seventh, use of diagrams and charts; eighth, number of pages given to a discussion of educational policy; ninth, list of other reports incorporated in general report; tenth, miscellaneous variations.

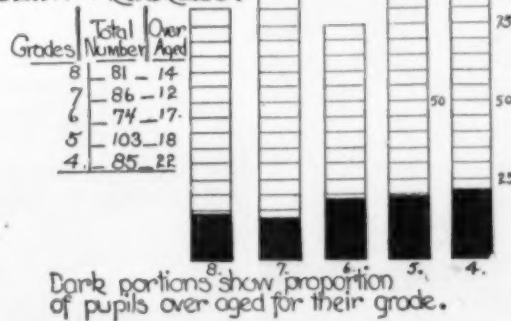
These criteria give us but a restricted analysis. The more subjective qualities of a superintendent's report cannot be measured by any standards at present within my command. I feel however, that the conclusions from a study of eleven reports will be fairly dependable.

Number of pages in report. I find a variation from 23 pages in the smallest report to 90 pages in the largest. This variation is not a direct one with the size of the school systems reported. It would seem from this that there is much difference of opinion as to the importance and function of the superintendent's report.

Practice as to index. A carefully prepared index is a recognized feature of any effective report. Of the superintendent's reports examined one had an index in front of the report, another had one in the back, and the rest none at all. It would seem then that a fairly standard practice should be adopted.

Outside cover. Naturally the outside cover of the reports examined gave the name of the town and the year of publication, but the places on the page where these items were found were as

CHART SHOWING THE LARGE PROPORTION OF STUDENTS IN GRADES 4, 5, 6, 7, + 8 WHO ARE MAKING SLOW PROGRESS.



An Illustration such as this explains to the Layman that the present condition is wrong.

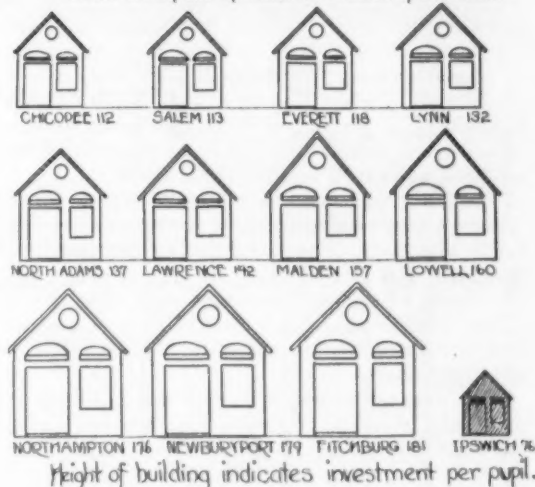
varied as the number of reports. Three reports had made an evident attempt to present a pleasing and dignified appearance. One used the outside cover (the first impression) for a frank statement of policy. The rest had obviously left the make-up of the cover to the printer.

Location of financial reports. Wide variation exists in the location of financial reports. Six superintendents put their financial report in front, three had them in the middle, and two put them at the end. One can easily see that in looking over the financial accounts much time is unnecessarily spent in locating the accounts.

Contents of financial reports. Here again I find anything but standard practice. Variation is from a condensed balance sheet to a completely itemized journal. Some of the reports contained a list of those to whom the school committee had paid money but no mention for

WHAT 12 COMMUNITIES HAVE SPENT FOR SCHOOL BUILDINGS FOR EACH PUPIL IN SCHOOL.

Based on report of Mass. Commission of Education.



Of these communities the per capita wealth of Ipswich is the greatest, but investment in school buildings the least.

An effective Argument for a new building.

what the money was expended. Five of the reports were so lacking in plan and arrangement that I was unable to really understand the financial situation after a careful study.

Other Statistics. There prevails a wide disparity in the matter of the kind of statistics presented and the manner of presentation. Some superintendents included a program of the grammar school graduation of the previous year, a full account of the deposits and payments of the school savings bank, an extended record of the ear and eye tests and other like statistics. Other superintendents limited themselves to a few really pertinent statistics.

Use of illustrative diagrams and charts. Three of the eleven reports employed this effective method of presentation. One report contained seven charts, another two, and a third one. The other eight reports contained no illustrative feature.

Discussion of Educational Policy. The value of a superintendent's soberly discussing Educational Policy is not yet appreciated by all Superintendents. In the eleven reports under consideration the variation of such discussion in

(Continued on Page 88)



FRONT VIEW OF THE LINCOLN HIGH SCHOOL.
Messrs. Berlinghof & Davis, Architects, Lincoln.

THE LINCOLN HIGH SCHOOL

The dynamic character of the modern American high school, its flexibility and its close adaptation to the needs of present day life, is better reflected in no single object than in the newest type of high school buildings. A high school which is thoroly imbued with the spirit of educational service is the Lincoln high school at Lincoln, Neb. The new building in which the school is housed, reflects the spirit of the school quite accurately. It is as progressive, as modern, as flexible as the school itself.

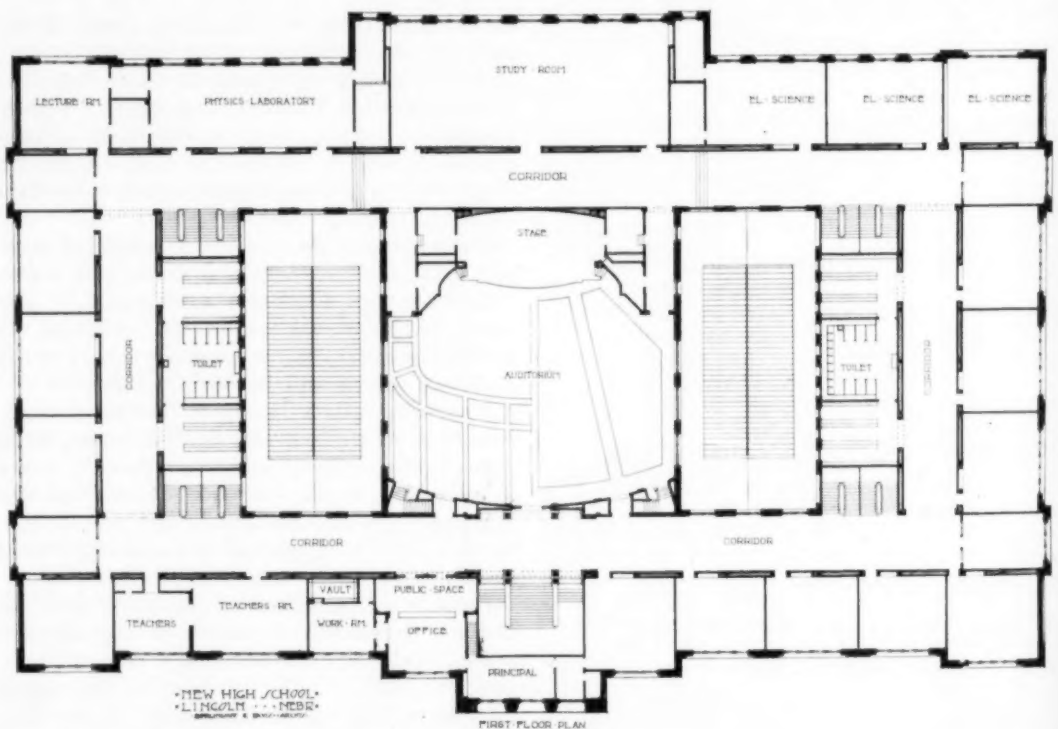
The building occupies a site of fifteen acres, facing a beautiful portion of a city park to the north and east. The building is three hundred feet long and two hundred feet wide, and takes the shape of a huge rectangle with classrooms, shops, laboratories on all four sides, and a great auditorium occupying the middle space between two light courts.

The general arrangement of the building is particularly straightforward, and simple. There are four side entrances placed close to the stairways, a broad triple front entrance and several service entries at the rear. A corridor, sixteen feet wide, adjoins all of the schoolrooms proper and affords the means of easy circulation. Travel from floor to floor is facilitated by the location of the four double stairways at the intersection of the corridor angles. The placing of the locker and toilet rooms to adjoin the shorter corridor runs between the stairs is a splendid utilization of space, and permits of considerable time economy in entering and changing classes and in final dismissals.

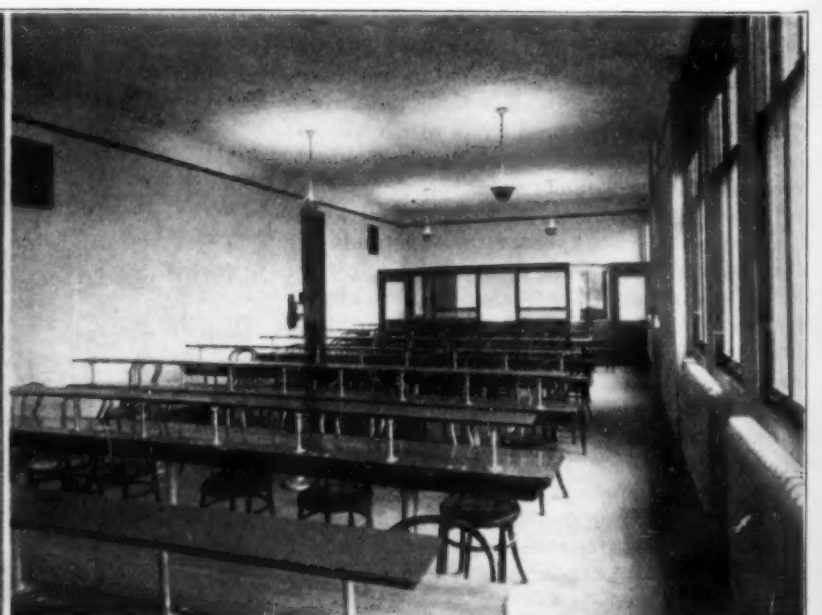
The ground floor which is on a level with the surrounding site is devoted most largely to the

vocational and physical education departments. It contains an office for the assistant principal, a book and supply room, a large print shop, a laundry, a large room for sewing, a domestic science room, a housekeeping suite, a lunchroom with kitchen, two large rooms for typewriting

and bookkeeping, five regular classrooms, five commercial classrooms, two gymnasiums and a plunge. The cafeteria has a seating capacity of 360 and a service capacity of one thousand meals within a time limit of 45 minutes. The kitchen is outside the walls of the building



GENERAL VIEW, CORRIDOR IN THE LINCOLN HIGH SCHOOL.



THE BOOKKEEPING ROOM, LINCOLN HIGH SCHOOL.

proper so that the heat and cooking odors can be controlled. The gymnasias measure 38 by 85 feet each, and are provided with raised balconies and long dressing corridors. The plunge is lined with tile and is used by boys and girls on alternate days.

The commercial room is fitted with tables, in the manner of business offices and has an enclosed space for accounting and banking practice. To economize in supervision, the type-writing practice room is separated from the main business classroom by a glass partition.

The first floor is given up almost wholly to classrooms. It contains eleven regular and four small classrooms, several teachers' rooms, the principal's office, three rooms for elementary science, a physics laboratory, a lecture room, a study hall (capacity two hundred pupils) and locker and toilet rooms.

The main floor of the auditorium is entered from the first floor. It is fitted with opera chairs and has a total seating capacity including the balcony of 1,400 persons. The room is simply, but very neatly, finished in a manner in keeping with its importance.

The second floor is given up to twelve regular and three small classrooms, a chemical laboratory and lecture room, botanical laboratory and conservatory, agricultural, zoological and physiological laboratories, toilet and locker rooms. A large study hall seating two hundred and a library which serves also as a study room, are located on this floor. The balcony of the auditorium is entered from the front and rear corridors of the second floor.

The library is furnished with steel book shelving and special oak reading desks and chairs. The wood trim is of oak and the floor is of the same material, laid in herringbone pattern. The entire woodwork is finished in a dark-brown tone which gives the room a tone of quiet and dignity.

The fourth floor which occupies only the central portion of the building, contains large art rooms, two long exhibition galleries, a music room and two small rehearsal rooms.

The music room will seat three hundred persons. It has a stage large enough for an entire student orchestra and is used each week for band practice, chorus rehearsals and vocal classes. After the regular class hours, it is used for society meetings, for small student gatherings, etc.

The construction of the building is concrete and steel; the corridors and stairs are floored with terrazzo and wainscoted with marble. The classrooms have composition floors and the laboratories and toilets have tile floors. The wood trim throughout is oak, stained a mellow brown and waxed.

The power plant is located in a separate structure in the rear of the main building. Three high pressure boilers, fitted with smoke-consuming furnaces, generate a total of three hundred horsepower for electrical energy, and for heating and ventilation.

The heating system is of the steam vacuum type, with direct radiation in all classrooms. Fresh air, to the amount of 132,000 cubic feet per minute, is supplied thru the ventilating ducts by means of two fans. Re-circulation of the air is provided for when the classrooms are not in use.

The electrical equipment is unusually complete. Indirect lighting is provided for all classrooms, laboratories and workshops. The transformers in the basement permit the adaptation of power current to the several types of motor driven machinery and to the laboratories.

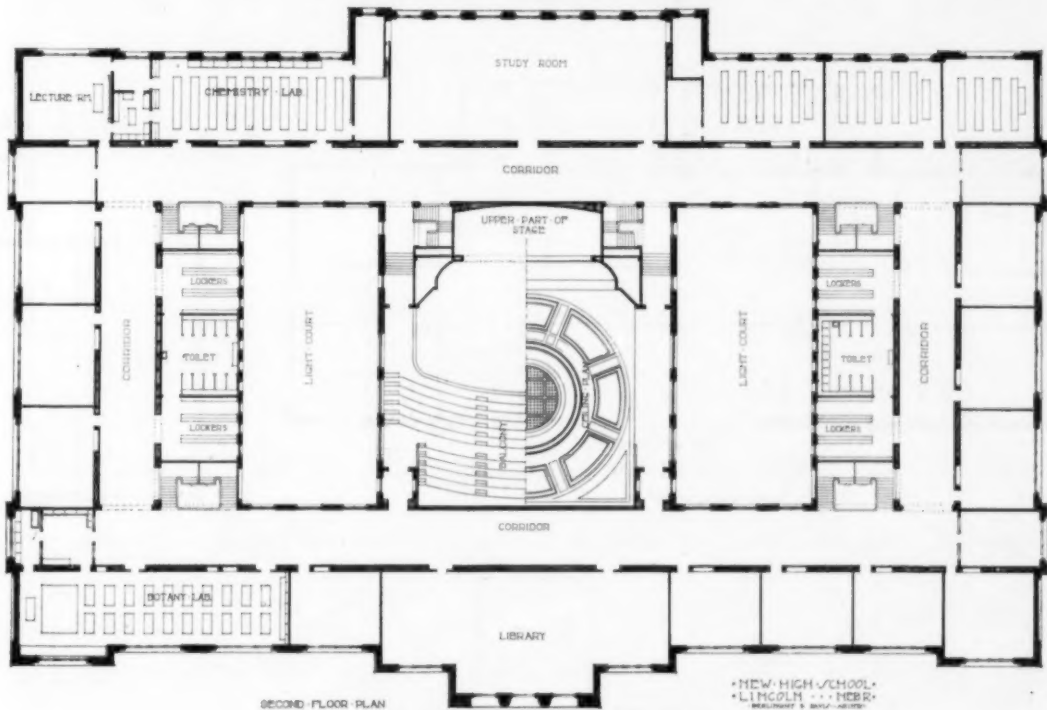
The items of cost which entered into the building are as follows:

General Contract	\$348,334.83
Heating and Ventilating.....	51,543.60
Plumbing	32,832.80
Electric Wiring and Machinery....	21,828.31
Heat Regulation	6,120.55
Plumbing Marble	9,320.80
Sheetmetal Work	3,961.31
Water Main	236.69
Side Track	571.41
Chimney	2,067.27

(Concluded on Page 95)

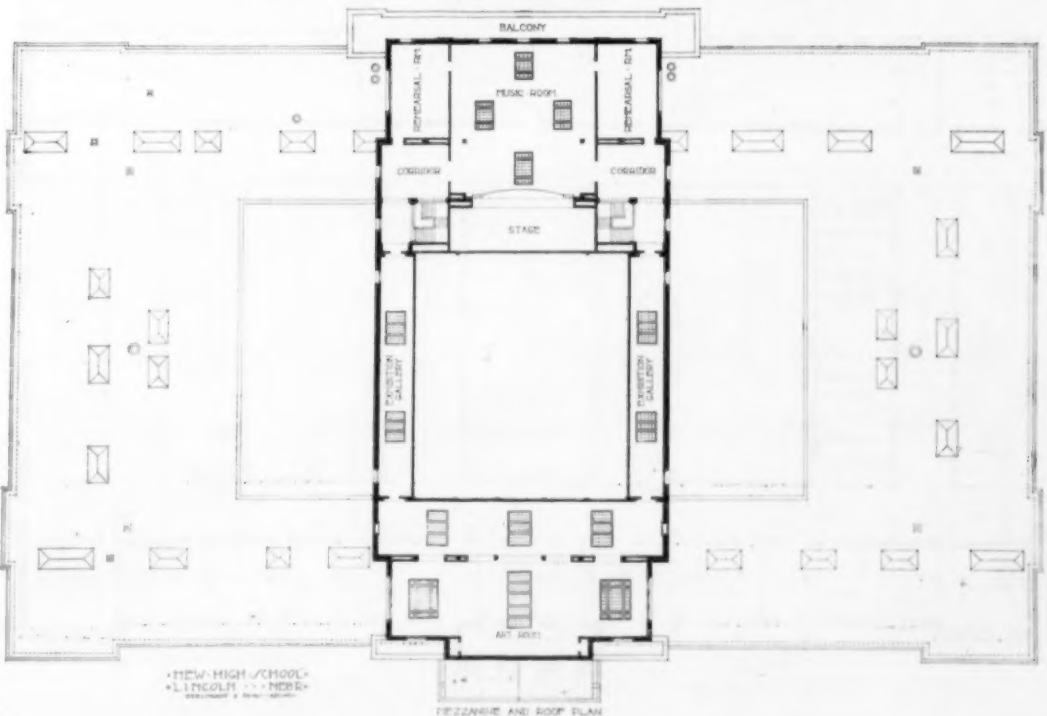


AUDITORIUM, LINCOLN HIGH SCHOOL.



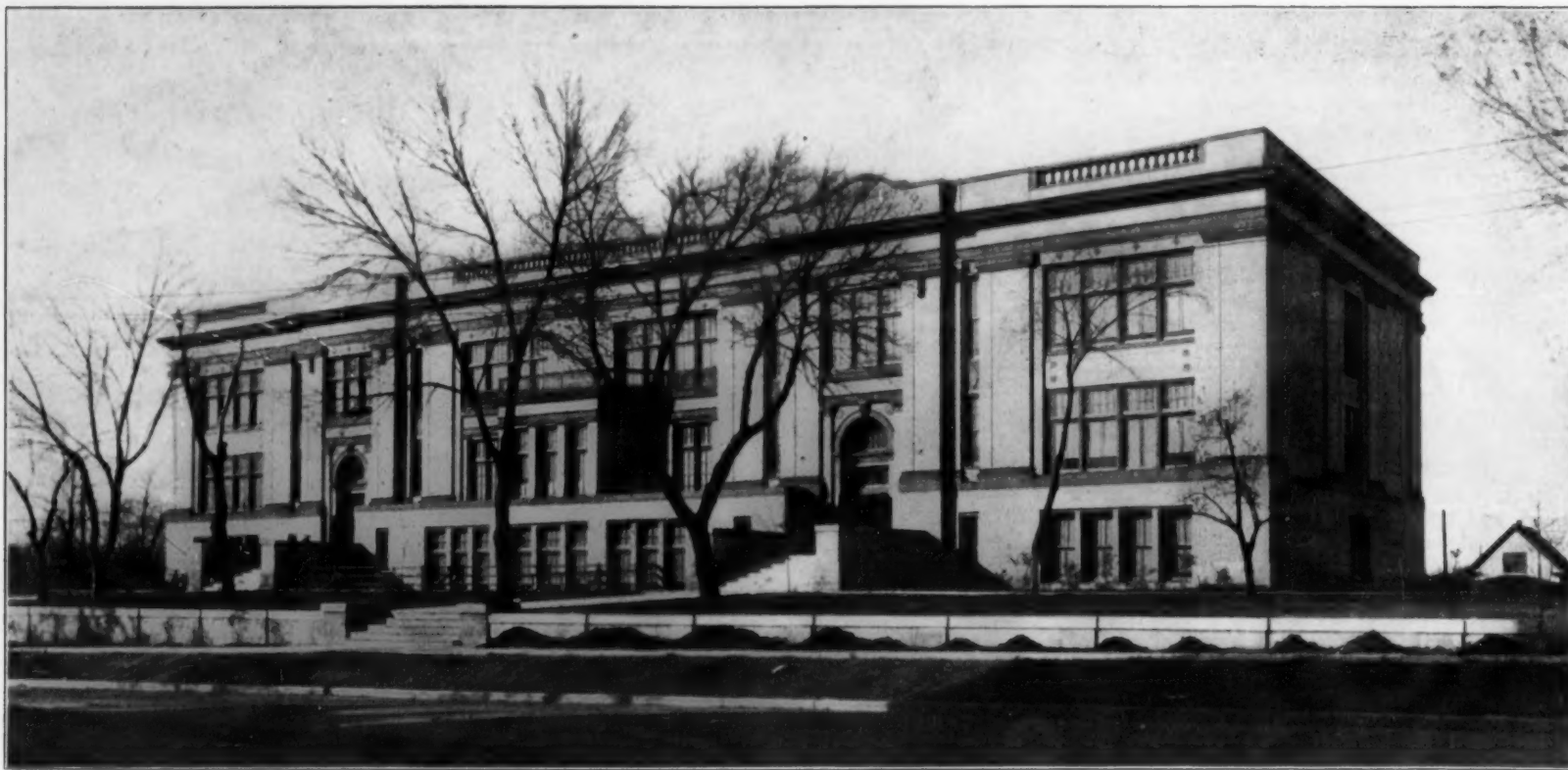
SECOND FLOOR PLAN

NEW HIGH SCHOOL
LINCOLN - NEBR.
BROOKHART & BROS. ARCHT.

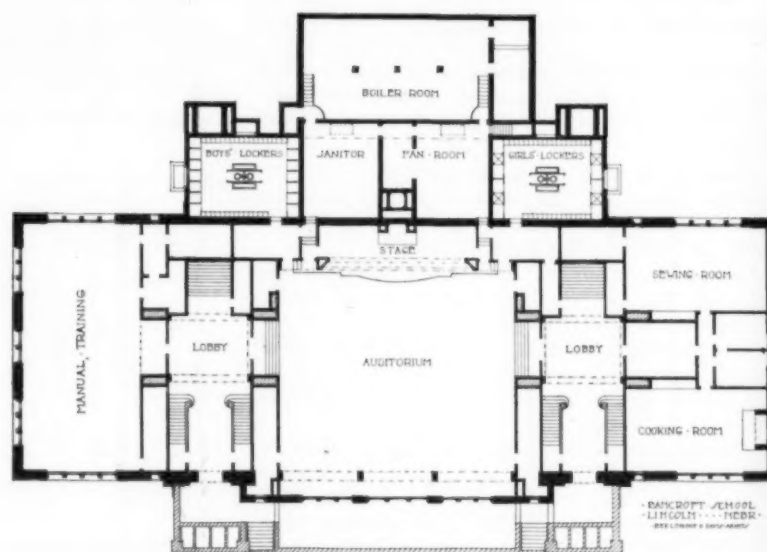
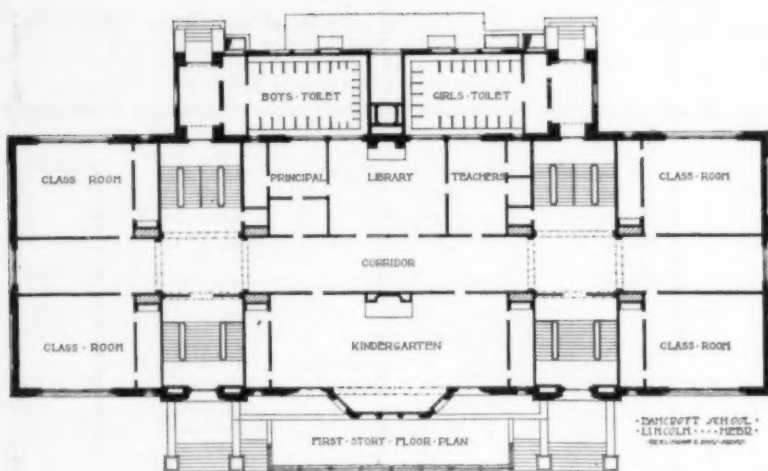


MEZZANINE AND ROOF PLAN

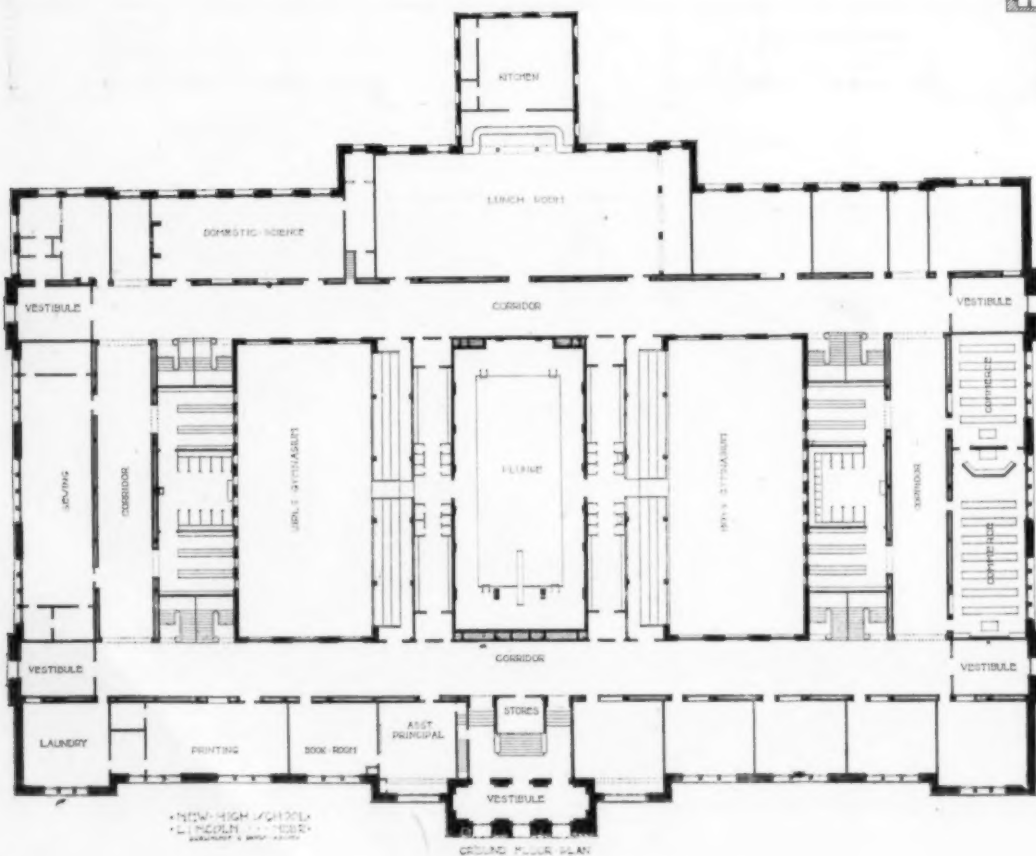
NEW HIGH SCHOOL
LINCOLN - NEBR.
BROOKHART & BROS. ARCHT.



BANCROFT PREVOCATIONAL AND JUNIOR HIGH SCHOOL, LINCOLN, NEB.
Berlinghof & Davis, Architects, Lincoln.



(See Second Floor Plan, Page 95)



THE BANCROFT JUNIOR HIGH SCHOOL.

The Bancroft Junior High School has been planned especially to house a school consisting of seventh, eighth and ninth grades and to provide space for vocational classes. The building is wholly fireproof and is constructed of concrete and steel and terra cotta.

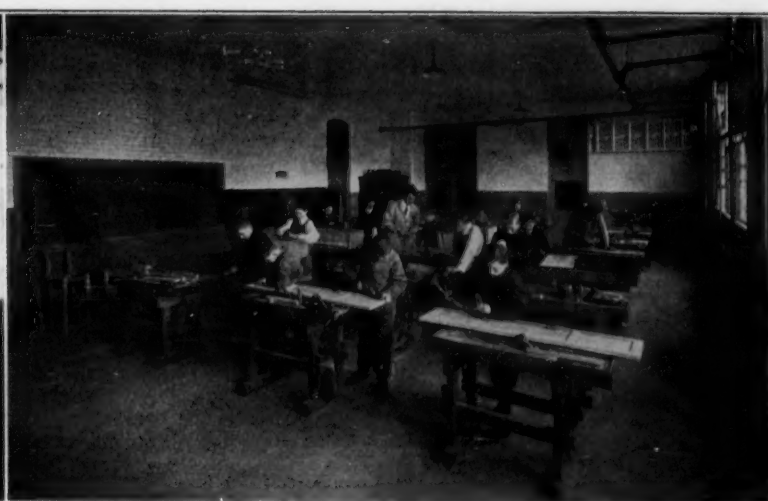
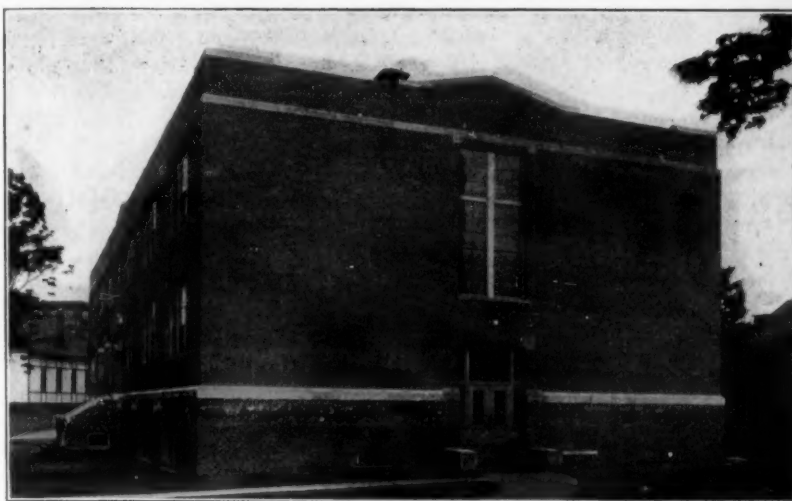
The building contains in the ground story a large woodworking shop, a cooking room, a housekeeping suite, sewing and fitting rooms, locker and toilet rooms, a boiler and fan room, and a large auditorium. The last mentioned room is equipped with a large stage and is intended not only for school exercises and public gatherings but serves in addition as a school gymnasium.

On the first floor there are four standard classrooms, a kindergarten room measuring 24 by 60 feet, a library, an office and a teachers' room. On the second floor there are eight standard classrooms and two small recitation rooms.

The building cost \$185,000 complete and the site cost \$17,701.

The building is equipped with a plenum ventilating system and has supplementary steam radiation in each classroom. The sanitary equipment is of the most modern school type.

The building was designed by Messrs. Berlinghof & Davis, Lincoln.



PREVOCATIONAL SCHOOL, NEW BRITAIN, CONN.
Walter P. Crabtree, Architect, New Britain.

A TYPICAL SHOP IN THE NEW BRITAIN PREVOCATIONAL SCHOOL.

NEW BRITAIN PREVOCATIONAL SCHOOL.

The prevocational school which was completed a year ago at New Britain, Conn., is one of the first in the United States to be devoted wholly to the preparation of boys and girls for entrance into their respective trades. The plans for the structure were begun early in 1914, after an extensive study had been made by the building committee of similar schools in the East and Middle West. The building was completed and occupied in the spring of 1915.

The building which stands at the rear of one of the grammar schools faces on two narrow streets and has an imposing main entrance. It is three stories in height, 160 feet long, 64 feet wide, and has a total content of 432,120 cubic feet. The construction is fireproof thruout; the bearing walls are of concrete and brick, with floors of concrete. All necessary precautions against the spread of fire have been taken by the architects. The exits at each end of the building are capable of discharging the children without haste or confusion, so that the expense of erecting fire escapes is avoided. The window surface which is more than one-fifth of the floor area, offers adequate light at all times.

The ground floor, which is on a level with the street, offers large and well lighted rooms for all kinds of shop work. Space is devoted to wood-working and joinery, printing, painting, sheet-metal and metalworking shops, and to a boiler and a stock room.

The first floor contains four classrooms, an electrical shop, print shop, bookbinding room, mechanical drawing room and an office for the principal.

The second floor is devoted principally to household arts work. Space is provided for four classrooms, two large rooms for cooking instruction, a housekeeping suite, and dressmaking and sewing rooms. The remaining space is devoted to store rooms.

The building cost complete, without furnishings, \$53,343, or \$0.12½ per cubic foot, making the cost very low for a fireproof structure. The construction cost \$45,385, the heating and ventilating \$4,344, the plumbing \$2,275, and the electrical equipment \$1,339. The cost of the furnishings amounted to \$9,000.

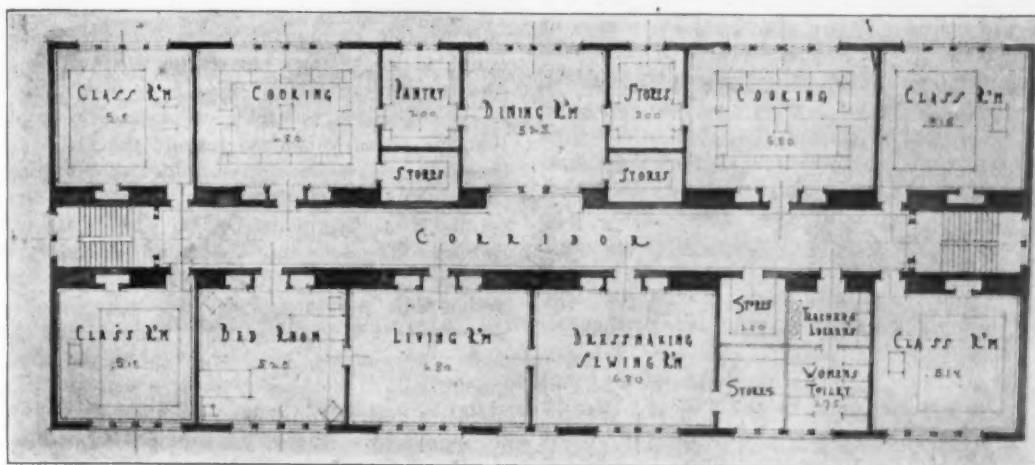
The building was planned and erected under the supervision of Mr. Walter P. Crabtree, Architect, New Britain.

THE SERVICES OF AN ARCHITECT.

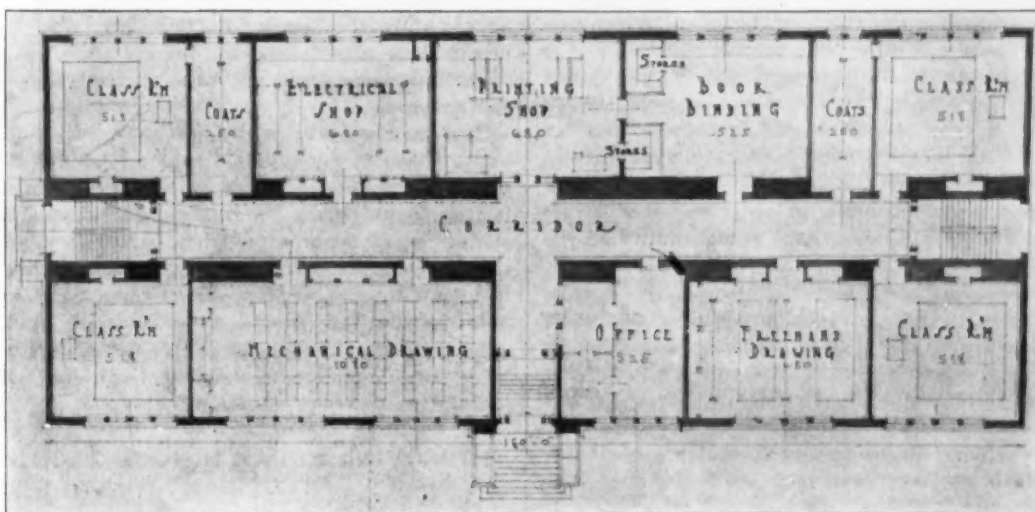
C. E. Schermerhorn, A. I. A.

The thinking public is awake to the value of the services which an architect is capable of rendering, and recognizes that his province bears the same relation to the owner as that of a specialist in medicine or surgery to his patient. In countless ways the expert advice and suggestions of an experienced architect will be found to have substantial value, and his worth, in this respect, cannot be economically ignored by anyone who has determined to build, whether it be a bungalow or a great commercial or monumental project.

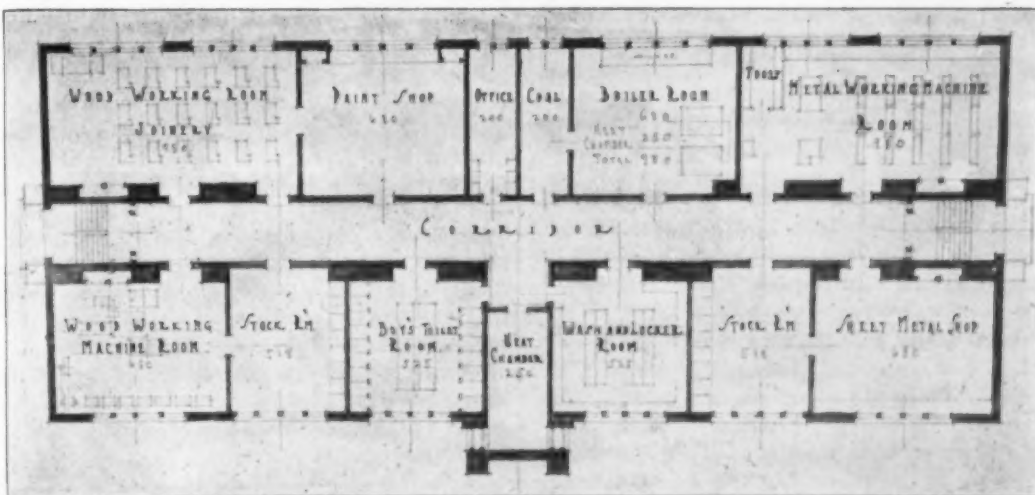
(Continued on Page 61)



SECOND FLOOR PLAN.



FIRST FLOOR PLAN.



GROUND FLOOR PLAN, NEW BRITAIN PREVOCATIONAL SCHOOL.

THE AMERICAN School Board Journal

DEVOTED TO

Legislative and Executive School Officials

WILLIAM C. BRUCE, Editor

EDITORIAL

CHICAGO'S NEWEST DIFFICULTY.

The Chicago Board of Education and the teachers of the city are again at war. The board at its first meeting, in June, passed a rule abrogating the so-called merit rule by which, for a quarter century, teachers have been automatically re-elected each year during satisfactory service. The new rule, which limits the term of each teacher to one year, is necessary, according to a majority of the board, to eliminate from the system teachers and principals who are not competent but who for some reason or other have been able to receive a favorable recommendation from their superiors. On the teachers' side it is claimed that the new rule has a political origin and that it is intended to give the "invisible government," thru individual members of the board, an opportunity to punish teachers who have for some reason gained the disfavor of the powers that be. The new rule is said to be directed against the teachers' federation and is intended to secure the discharge of certain women and men who have been active in its councils.

The new rule is, we think, destructive of real progress and efficiency in the Chicago schools. It has aroused distrust and antagonism and, if it is followed by wholesale dismissals, whether just or unjust, will cause a chaotic condition.

The presence of incompetents in the teaching staff of the Chicago schools is, in the ultimate analysis, the fault of the board of education. The presence of a poor teacher in a school is largely due to the principal and to the district superintendent; the failure to eliminate the incompetent at the end of her first year of service lies with these two supervisory officers who in turn are responsible for their own efficiency and for the efficiency of their districts to the superintendent. The final responsibility to the people is with the board of education. It is the board's business, thru its rules and general policies, to provide machinery which will insure the elimination of unfit teachers as promptly as they are discovered. The Chicago board has hardly done its full duty if its administrative officers allow the number of teachers, who are not capable, to grow so large that wholesale dismissals by the direct action of the board are necessary.

We can hardly imagine that the number of unfit teachers in Chicago warrants the present drastic action. It would seem rather that some positive program of reform is necessary to key up all the teachers in the service, and to so expose incompetence and unsatisfactory work that it will largely eliminate itself or at least make its elimination easy and prompt. Such steps as the board may take must necessarily include attention to the unification of all factors for the benefit of the children, and the public recognition that continuance in the service is dependent upon merit and that merit alone will determine such continuance.

BUYING TEACHERS' SERVICES.

School boards are frequently accused by teachers of driving hard bargains in fixing the salaries which they pay beginners in both teaching and supervisory positions. This is not true of the large cities but applies to small communities, particularly villages and rural dis-

tricts where no regularly fixed schedule of salaries is in force.

There is much justice in the charge, for some school boards apparently buy the services of teachers as they buy other commodities in their private businesses. They apply the rule of supply and demand and reverse an ancient law to read: "Let the seller beware."

In justice to school boards, it must be said that the majority are not actuated by any but the best motives. The apparent parsimony is enforced by conditions over which the members have no direct control. Teachers' salaries have risen enormously during the past ten years. The character of school accommodations has been greatly improved and the amount and type of the instruction has been broadened and increased. In every direction, school costs have risen at a rate out of all proportion to the increase in revenue. School board members, confronted with a growing budget and with numerous taxpayers' complaints of all kinds, are naturally inclined to economize wherever they can.

It is our opinion that teachers in general ought to understand better the worth of their services and ought to have something of the spirit of the commercial employe who knows that his success depends largely upon the sale by his own services. It is a fact that some of the most successful superintendents, college professors and heads of normal schools are particularly strong in this direction. Without losing anything of their professional spirit, they understand that they will be appreciated in accordance with the manner in which they value their own services, and insist that this value be recognized.

School boards, on the other hand, ought not to approach the matter of hiring teachers in a purely commercial and materialistic attitude. Teaching is one of the most important of the occupations which has for its ultimate purpose the welfare of the state and of society. By its very nature the teacher is removed from the competitive atmosphere of business and from everything in which pecuniary returns are a factor.

The average teacher is quite satisfied if he or she receives enough to live comfortably and to lay aside a bit for a rainy day. School boards should take this into consideration and should be as generous as they can, remembering that, in proportion as the teacher is satisfied, and in proportion as she lives a comfortable, intellectual life, surrounded with those advantages which make for better living, in that proportion he or she will render a valuable service to the schools.

IMPROVING RURAL SCHOOL ARCHITECTURE.

The character of rural schoolhouse architecture is being materially improved by the process of standardizing country schools. The idea originated some four or five years ago in Illinois, and has now spread to Wisconsin, Michigan, Minnesota, New York, Kansas, Pennsylvania and other states.

Thousands of school districts which have a splendid course of study, a good teacher and fair equipment have been shown to be deficient in the character of the school building, in its arrangement, lighting, heating and cleanliness. The presence of a standard school in a county has frequently aroused the interest of practically every other district, and the discovery that the rating of a standard school or of a superior school could not be obtained because of the single deficiency of the character of the school building, has caused much modernizing of old buildings and still more construction of new buildings.

If the standardizing of country schools does nothing but raise the quality of the physical

surroundings of the school, it will be well worth while. If a similar plan could be applied to city schools, we imagine that thousands of children who are now housed in inferior, worn out, old schools, would rapidly find themselves in modern school buildings.

THE SCHOOL SUPPLIES COMMITTEE.

The school board committee which has, among other duties, the selection and purchase of supplies and equipment has an important function, and the manner in which each performs its work may have a far-reaching influence upon the efficiency of the school system. The committee requires men of broad judgment and business acumen who will not accept blindly the recommendations of the superintendent and of the heads of departments but will weigh each matter and judge it for themselves, remembering that the superintendent and his associates are experts and that their judgment must be taken as such.

A supplies committee which does not examine carefully every item brought to it, and which does not add to the superintendent's test of general educational efficiency a test of commercial efficiency is hardly fulfilling its full obligations. The school system has always a limited income to be devoted to the education of children. Much of the efficiency of the schools depends upon the kind of economy practiced, and this economy cannot be said to be real if it does not mean combining to the highest possible degree, in the articles bought, value and reasonable cost.

No school supplies committee is fully discharging its duties unless it knows that every item is the best which can be had for the money and that no money is being put into any item which could be used to better advantage for some other item.

LOOKING FOR A SUPERINTENDENT.

Experienced school board members agree that the most difficult duty which a board has to perform is the selection of a superintendent, particularly in the case of a sudden resignation at, or after, the end of the school year. In practically every other phase of the lay control of the school system, expert advice may be, and is, brought to bear upon the appointment of men and women for school positions, be they principals, teachers, architects, engineers or school physicians. Only in the choosing of a chief executive for the schools must the members rely almost wholly upon their own judgment.

Of the efficient methods of securing an able man who is available during the summer vacation, that of publicly inviting applicants is most commonly used. It may be relied upon to afford a large choice. A better plan, to our mind the best plan, is to ascertain where men who possess exceptional ability and force as executives, are located, and by a process of elimination, to get the best man. The use of this plan should not preclude the consideration of any and all men who may apply for a superintendency. It should involve, primarily, consultations with prominent educators, particularly with men in the state departments of education who, thru their visits to numbers of cities, have been able to come in contact with, and observe at close range, the work of a large number of superintendents. It should also involve, finally, consultation with men in the education departments of universities and colleges, and with other persons who have a knowledge of the man or men who may be available.

In finally making a choice, many considerations will enter into the conclusions of a school board committee, but it is especially desirable that these considerations shall make ability, force, experience and possible adaptation to a

community predominant over every other factor. Such a committee will naturally consider it unbecoming of itself to permit any discussion of the applicants' politics, religion or similar personal factors to enter into its deliberations.

Primarily, good sense should guide in the deliberations of a committee and of a board.

A GENEROUS GIFT.

Supt. Ben Blewett of St. Louis has given the sum of \$50,000 as the nucleus for a foundation to be established for the benefit of the teachers of the city. The income of the fund is to be available for indigent teachers in a manner and for the purposes to be determined by a board of directors. The gift is to be a memorial to the late Jessie Parsons Blewett, wife of Mr. Blewett, and to her parents.

Mr. Blewett's gift is one which is particularly commendable because teachers as a class are very rarely considered in the benefactions of our wealthy men. Altho each year sees the establishment of funds and homes for various classes, teachers are overlooked. At that, their profession is notably underpaid and a serious misfortune in middle life invariably means destitution.

In the case of teachers, destitution is doubly hard because it hits persons who, by education and intelligence, are accustomed to the finer things of life and who, thru their very work, have been compelled to lead an intellectual and comfortable existence. Their work also has unfitted them for entering into commercial occupations and has taken from them that spirit of competition which is so effective in helping people in other walks of life.

It is to be hoped that Mr. Blewett's example will be followed by wealthy men in our large cities, to the end that funds may be available for disabled teachers and for such as require temporary help in the shape of loans or other immediate assistance. In the long run, such benefactions are a contribution to the efficiency of the schools because they inevitably mean happier and more contented teachers in the service. In so far, too, they are contributions to the stability of the nation.

SCHOOL SURVEYS.

An Ohio educator recently condemned school surveys by saying: "This spasmodic survey method of public school supervision reminds me of the 'umbrellas mended or hats cleaned while you wait' method of doing business. For public school improvement we must look to continued and every day supervision, the kind that keeps in touch with every day conditions and changes and can meet them intelligently thru adequate acquaintance."

To compare school surveys with the business methods of umbrella menders and hat cleaners is rather unfortunate, particularly when it is remembered that what may be called business surveys are regularly made by the most prosperous and efficient business establishment. Hardly a businessman, with interests of any size, who does not call in annually or biennially, an auditor to check his books and to suggest means for improving the same; hardly a large manufacturer that does not call in at longer or shorter intervals, experts in scientific management to check up his manufacturing methods, to stop leaks and to show where profits may be increased. The employment of such an expert does not imply any lack of continued personal supervision which is made intelligent and adequate from a complete knowledge of the business. No business house would get along without its engineers, its managers, its factory superintendents, its sales managers, its bookkeepers, etc.



Minerva: You'd better stick to your oil, John.

—Life.

Businessmen have one certain and very definite method of judging the efficiency of their establishments. It is their annual trial balance which shows the amount of money gained during the year and which makes clear the percentage of profit that has been made. Schoolmen can apply no such test because schools are not conducted for immediate profit and their product cannot be measured in such exact terms as dollars and percentages. The fact that the product of the school is an indefinite one and has spiritual and civic values, that defy largely the use of the decimal system, is doubly a reason why they should be surveyed and why periodic examinations should be made of their methods, organization, finances, etc.

No superintendent who is truly efficient and who has the right attitude toward his work will object to the employment of an efficiency expert to check his work and to survey him. It is pre-supposed, of course, that the survey is made in an honest spirit and without ulterior purposes.

EFFICIENCY IN THE COMMERCIAL DEPARTMENT.

For a number of reasons the efficiency of the commercial departments in our high schools have not particularly won the admiration of businessmen. Chief among these reasons is the inability of the average high school graduate to handle the devices which the modern business office finds essential for quickly and economically carrying on its work. The difficulty here



When a feller needs a friend.

—Briggs, Chicago Tribune.

has not been with teachers or with textbooks, or with courses of study, but it has been largely due to the fact that school boards have been slow in introducing actual business office practice in the schools thru the use of the modern devices of the office. It is rare indeed to find a high school graduate who knows how to cut a mimeograph stencil, who is familiar with the use of a stamping machine, who is not afraid of an envelope sealer or envelope opener, who knows a multigraph when she sees it, or who can operate an adding machine with any degree of accuracy and dispatch.

For true efficiency, the modern commercial department must not only have specially designed commercial desks, good textbooks and blank books and other supplies which correspond to the materials used in the business office. They must also have the equipment and afford an opportunity for practice in those mechanical forms of office work which are now so indispensable.

EVIDENCE OF WORTH.

The school board which feels keenly the criticisms of its growing budgets and of its ever-increasing ratios of cost, can thus justify its official acts in the eyes of the people by giving the latter actual facts and actual figures. The day has long passed when generalizations about the cultural and civic value of education are accepted without question. The citizens and the press today require specific information on the service of the schools before they are willing to consider increased tax levies and higher school costs.

The school which is confronted with criticisms might well study the method adopted in the town of Curwensville, Pa., by Supt. H. O. Dietrich, in presenting to the community a pamphlet with definite, brief statistics and other school facts showing why the schools cost more and why this cost is justified. In summarizing this evidence, which is thoro and complete, Mr. Dietrich asks—

Is it True—

When the boys and girls of Curwensville have surpassed the spelling average of 84 cities and the writing average of 54 cities,
When the high school enrollment has increased 50 per cent in the last four years,
When 28 per cent more graduates are away at higher institutions than four years ago,
When the professional training of our teachers has increased 54 per cent during the past four years,
When the average cost per pupil is lower in both the grades and the high school than other places of similar size,
When the average salary for grade and high school teacher is lower than that of other places the size of Curwensville,
When retardation ranks way above that of 318 random and 26 specially selected cities,
When actual results have been measured by standards and comparisons,
When university authorities have pronounced some of our teaching on a par with that of Philadelphia and Pittsburgh,
When the State Department highly commends our work,

That Our Schools Cost Too Much?

"Simple as it seems, it was a great discovery that the key of knowledge could turn both ways; that it could open as well as lock the door of power to many."—Lowell.

A flagrant illustration of the evil of politics in school affairs is the dismissal of Supt. L. J. Montgomery of South Bend, Ind. With practically every public and private organization supporting him, two members of the board summarily discharged him.

Of all laborers, the teacher is most worthy of his hire.

A total of 154 school districts in Texas provide homes for teachers. Outside of Washington, what state can equal this record?

WANTED—AN EDUCATIONAL AUDITOR

Some years ago our school board faced a new situation.

Our clerk, who had held office for twenty years, was grown an old man. We could no longer count confidently upon his memory for dates and amounts; and extra tasks or "improved" methods were not assumed as easily as once. Little by little a considerable share of his work had been cheerfully assumed by our president and by our superintendent of schools, but, when it came to his bookkeeping proper, no one could offer to assume that without risk of giving offence. For a generation, his unfailing accuracy had been proverbial among us but now we had come to distrust it and so we did what is annually being done by an increasing number of school boards, even the smaller country boards, we hired an expert accountant to go thru our books, at the end of the year, and audit them.

Since then our one time clerk has gone to his reward, another and younger man fills his place, but still our accounts are annually audited. A copy of the audit is mailed to each one of our members and there is a deal of satisfaction in having a record, in black and white, of our receipts and expenditures and in knowing that it is right.

Today our school board faces another new situation.

For a full dozen years our school had been under Superintendent Curtis (I give a fictitious name) and all of us feel that his administration was successful. We knew his ways and his standards, and we accepted as final his verdict upon any teacher. If he said, "Miss Jones is doing good work," we agreed and next year we raised Miss Jones's salary. If he said, "Miss Smith is not strong in discipline," that settled it and Miss Smith was fortunate if next year she held her position. He had not made himself a dictator but he had made himself an unquestioned authority: there was not one of us who would have thought of holding his own layman's opinion, as against the professional opinion of Superintendent Curtis.

Then came the new situation: a city having a salary-offering power with which we could not compete annexed Superintendent Curtis and to us came Superintendent Raines.

He is a good man and an educator, of that we fully assured ourselves before we engaged him. We did not expect to find in him the duplicate of Superintendent Curtis and we were not disappointed: that they would hold differing views on minor points of doctrine was to be looked for—we looked for it and we found it—but I distinctly recall my feeling of startled bewilderment when one day he said, "Miss Jones is not a strong teacher." Later I took particular pains to find out whether this was a passing impression or a settled conviction and I found that it was a settled conviction. He was as sure that Miss Jones was one of our poorer teachers as Superintendent Curtis had been that she was one of our best.

Once I had grasped that fact, I set out deliberately to learn his estimate of our teaching force, without of course ever quoting to him the views of his predecessor. I found that, in the case of many instructors, their estimates practically agreed; but, out of our corps of 22 teachers, there were perhaps four whom Superintendent Curtis had considered unusually good and whom Superintendent Raines considers distinctly poor. In the case of each of these, Superintendent Raines has given me his reasons for disapproval. Superintendent Curtis never gave me his reasons but he undoubtedly had them. I simply had never asked.

Now, our problem is: Which verdict is right? Who shall decide when doctors disagree?

Some, I suppose, would tell us that this is a matter the board itself must decide. We are the servants of our community, especially chosen to see (among other things) that the best available teachers are hired. If verdicts differ, we are the court of final appeal and there is no shirking so evident a responsibility.

Barring one faithful exception, ours is the universal, tho unpardonable sin of school boards, *we do not regularly visit schools*; but, even if we did, I frankly question the judgment of myself and my colleagues in such a matter. There is among us but one trained educator and his experience has been wholly outside of public school work. Is it reasonable to suppose that, in our necessarily few and brief visits, we can better estimate a teacher than does the superintendent? Excepting the children, he is more vitally helped or hindered than any one else by the quality of her work; and, always excepting the children, he is more closely in touch with her work than any one else. Surely, in such a matter, his opinion should take precedence.

From which it may be argued that plain common sense would lay the whole matter upon the shoulders of the man who is superintending *now*. He is the head of our teaching force, let him decide, absolutely, who shall be his subordinates; the question is not whether a teacher is a good teacher but whether she is a good teacher *working under him as a part of his administration*. Practically this is the course we are likely to take: only—to me it is not wholly satisfying. I am not quite willing to admit that educational fitness is a matter so relative that it is possible for the same teacher to be a really "good" teacher under one superintendent and a "poor" teacher under another. Much more reasonable I find it to believe that there are certain definite standards, and that there are certain teachers who may be confidently counted upon to "make good" under any normal conditions. If such a teacher prefers not to work under a given superintendent, I would at least like to be able, in writing a recommendation, to

give her conscientiously a clean bill of health and that in positive terms. Where doctors disagree, I would say, "Go to the experts."

Two such there are upon whom we have some sort of claim: our county superintendent and our state high school visitor. But as to the former, I question whether we have the right to ask him to decide for us such a matter as this. We might, if it involved a controversy, but we have no quarrel with Superintendent Raines and he has none with his teachers. Moreover, granted our right to lay the problem before him, not every county superintendent would care to solve it. Some men would not be able to view it entirely apart from its political possibilities and others would simply assign it to an assistant—and the county superintendent's assistant is not always an expert of the first water.

The case of the high school visitor is different. Here is a man trained in comparing school with school and in the rapid appraisal of many teachers; but his task is, specifically, to articulate our high school with our state university. His verdict upon high school conditions and high school teachers, upon superintendents too, for that matter, is invaluable but, when one steps from the high school into the grades, conditions are different. Here he is outside his highly specialized field and we are outside our rights in asking from him a report.

For all which reasons, I have come to look forward to a day when there shall be available an educational auditor, whose services a board may secure and pay for, a man who can frankly go to a superintendent announcing his mission with as little embarrassment as does the accountant who introduces himself to our clerk and treasurer, a man who will go into every grade, set down his findings, formulate them and submit to the board that employs him a condensed but authoritative report, which cannot of course be as infallible as if it dealt with such comparatively simple data as figures but which would command the respect of any unbiased educator.

Already there are gropings after such a factotum. A musical expert was secured to "audit" our newly established music department and report her findings; I recall the enlistment of a specialist friend to perform a like service for our department of manual training. More than once, usually upon a hint intentional or accidental from the superintendent, I have sent a trained, out-of-town teacher to visit a grade of doubtful standing, in which I myself would have been a marked man. Such tasks, however, are but odd jobs; we want the man who will do for our whole educational department what our expert accountant does for our clerical and financial department and, that we may the sooner find him, there is inserted this "Want Ad."

TEACHERS DEFEND HOME WORK.

The Committee on School Administration of the New York Academy of Public Education has presented a comprehensive report on the value of home work for pupils in elementary, high and training schools. The material contained in the report was obtained thru a questionnaire addressed to representative teachers and principals of schools in the various sections of the metropolis, so that the inquiry constitutes a study of varying neighborhoods and conditions. It is the opinion of the committee that the results give the experience and judgment of over two thousand members of the New York teaching profession.

Out of a large number of letters addressed to educators, 616 replies were received by the committee from the following: Superintendents, boards of examiners and professors of training schools, 15; principals of high and training schools, 6; principals of elementary schools, 172; assistant principals of elementary schools, 56; class teachers of elementary schools, 367.

The inquiry reveals that there is a real demand for home work under proper supervision, that it is a factor in the improvement of home and school, and that the supervised study period in school can be profitably used for study and expansion. (Concluded on Page 36)



Lantern at Main Entrance to State Education Building,
Albany, N. Y.
Charles Keck, Sculptor, New York City.



A May Day in the Public School Playgrounds, Kingston, N. C.

IN speaking of education a famous philosopher once said, "The first requirement is a good animal."

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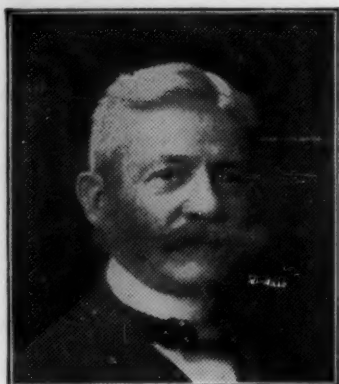
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THE HOLDEN PATENT BOOK COVER COMPANY

SPRINGFIELD, MASS.

MILES C. HOLDEN, Pres.

(Concluded from Page 34)

The committee makes the following suggestions and recommendations:

1. Out of 616 replies, 564 votes were recorded in favor of home study. This large majority proves conclusively a real demand for its continuance under proper supervision.

2. Compulsory home work should be prohibited below the fourth school year.

3. In the seventh year classes, the maximum time for home lessons should be one hour. In the eighth year classes, it should be one hour and a half.

4. There is a substantial agreement that home study, properly explained and carefully supervised, will develop self-reliance, neatness, concentration, accuracy, industry, responsibility, thoroughness, and the study habit.

5. Four hundred and seventy-six out of 554 replies agree that proper home study is a factor in the improvement not only of the school, but of the home as well.

6. Principals and teachers must use every means to make home work both honest and effective.

7. Systematic plans must be made for the efficient supervision of all home work, so that it may not become an undue strain upon the energy of the class teacher, nor take time which should be devoted to classroom instruction.

8. The fact that 98 per cent of the 4,252 boys, and 97 per cent of the 4,624 girls, who attended the evening study rooms in social and recreation centers last year were promoted, justifies this work, and proves the necessity for its continuance and extension.

9. A careful analysis of the time limits set by 515 principals and teachers shows that in assigning home work, actual "study" should require one-half the additional time which is given to the "written work."

10. It is believed that since 378 replies out of 538 strongly oppose the plan of giving credit for outside home work in music, cooking, and

like subjects, its proper administration in a large city is not practicable.

11. A decided majority (446 out of 560) justifies the recommendation that the school "study period" should be used both for actual study and for the proper explanation of home lessons.

12. Principals have no more important duty than that of carefully supervising both the assignments of home study and the methods of determining the honesty and efficiency of the results.

13. No home work should be permitted unless adequate explanations have been given in school by the teacher.

14. In departmental work, there is grave danger of the assignment of excessive home work. In graduation classes, however, pupils must be made accustomed to home work, or they will be badly handicapped when they enter high school.

15. In most schools it is advisable to ask the

parent to sign the written home work at least once a week.

16. In major subjects like arithmetic and grammar, only the "A" pupils should be expected to do all the work assigned. The "B" and "C" pupils should be given a smaller portion.

17. Below the high schools, no new work involving unexplained principles should be assigned, except as a voluntary task.

18. The chief aim of home work should be to supplement the classroom instruction. It should be educational, and should not be regarded as a preventive measure, to keep children off the streets.

19. To a great degree, home work varies according to neighborhood conditions. Every principal must, therefore, be held strictly accountable for the needs of his or her particular school.

20. Quality, not quantity, should be the standard of efficiency in judging the results of home work.

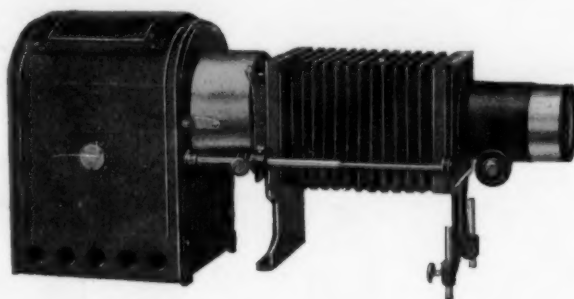
PLAY SUPERVISION

Supt. R. L. Cole, Perrysburg, Ohio

Supervised play is just coming into its own, and contrary to the general belief, it is just as well adapted to the village school or even the one-room rural school, as to the city school. As soon as the subject is mentioned, at once we think of a well-equipped playground. This is not at all necessary. Of course, play without apparatus requires more work of the supervisor, at least in getting it started. All that is needed for supervised play is a group of normal children and a teacher who is willing to put something of herself into the activities of the children aside from the activities of the classroom.

Nine out of every ten of the problems the teacher has to meet, have their beginnings on the playground at recess, or during the period of unorganized play. Stand in front of your window at recess when the children are going out and see what happens. Is it not something like this? The children rush out, break ranks as soon as possible, they yell, they seize each other. Some of the larger boys catch hands and play a game, the object of which is to knock down as many of the small children as possible. In the meantime the girls have lined up with their arms about each other and are walking five or six in line out in the street.

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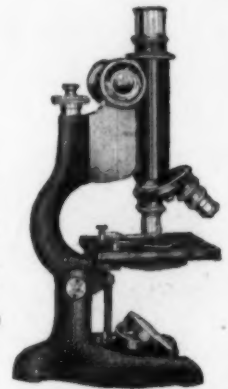
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Small children are hurt; boys have their clothes torn or are thrown in the mud, and all the difficulties are carried into the schoolroom.

Why is the boy a problem? It is because his teacher does not understand him. The boy is the most responsive creature in the world. Let a teacher show just some slight interest in the boy's activities and notice how quickly the boy becomes an ally of the teacher. The teacher who does not play with her children loses the greatest opportunity that is presented to her. Only part of the boy works, and usually a very small part at that, but the entire boy plays. If you want to understand the boy you have got to play with him. Find the interest of the boy and nine out of ten will respond. That interest can only be found thru getting close to the boy, and that can best be accomplished thru play.

In smaller schools no more than two rooms should ever be on the ground for a play period at one time, and then never without the teachers. These play periods should take the place of recess. The games to be played should be explained before leaving the room. There should be no delay on the ground, everything should be kept moving. So with large rooms it is better to have two groups playing the same game. Games should be taught at about the rate of one a week.

Results will be immediate. These are a few as expressed by teachers who have used the supervised play in their rooms: There is a better spirit in the room and the child's attitude toward the teacher is entirely changed. The teacher is not regarded as a task-master, but as a friend. The backward girl is brought out and loses her timidity. The rough boy has the corners knocked off and he becomes more thoughtful of others. The health of the children is improved. Some play under supervision that would never play in any other way. The listlessness of a dull day can always be

relieved by a game within the rooms. The room that plays needs little supervision otherwise. Supervised play will hold some children that would otherwise leave school.

In Perrysburg the play schedule is as follows:

First grade	9:30 to 9:50
Second grade	9:50 to 10:10
Third grade	10:10 to 10:25
Fourth grade	10:25 to 10:35
Fifth grade	10:20 to 10:30
Sixth grade	10:10 to 10:20
Seventh grade	10:00 to 10:10
Eighth grade	9:50 to 10:10

Any day that the weather will permit the children go to the grounds, and there engage in such games as Prisoners' Base, Cat and Rat, Three-Deep, Last Couple Out, Black Men, Odd and Set, Poison Tag, Cross Tag, Bull in the Pen, and a great many others that are similar. On rainy and on cold days when it is impossible to go out, there are hundreds of good games that are played in the schoolroom. Our teachers never miss the play period. It is as much a part of the daily schedule as is reading, and perhaps the very best part of that schedule.

Indoors the games used by our teachers most are seat changing games, a great many of which can be worked out by the teachers themselves. Besides these there are such games as Fox and Squirrel, Telegram, and numerous guessing games and word finding games, that can be made a definite part of the English work. These are very much better for the lower grades. In these games the children are all required to speak in entire sentences.

Marching has a big place in our play. It always makes an appeal to children, and is a great factor in discipline. The children always march to and from the playground, and on some days when it is not possible to play on the ground they march around the square. It is remarkable what a close relationship there is between an erect body and a mind that is

free from evil, especially among boys. The boy who is sitting on the small of his back had better be watched. Marching will make the children walk straighter and sit straighter, both literally and figuratively.

The year's play with us reached its climax in May, when we had a play festival, lasting an entire afternoon. Then the results of the year's work were shown in fancy drills, folk dances and games of all kinds. This without doubt was the biggest thing of our school year, because we had all the boys and girls at their very best.

It is hard in an article of this kind to bring out the things that might be of most value to other teachers, but I would like to end by saying: Get a vision of your greatest opportunity and then play, play, play. And if you do you will have no difficulty in working out the details.

THE COUNTY UNIT.

The United States Bureau of Education suggests the following essentials of the County Unit Basis of Organization for the administration of rural schools. They result from studies of the various regulations in the states now organized on that basis:

(1) The county the unit of taxation and administration of schools (except that in administration, independent city districts employing a superintendent would not be included).

(2) A county school tax levied on all taxable property in the county, covered into the county treasury, and divided between the independent city districts and the rest of the county on a basis of the school population.

(3) The county school funds, including those raised by taxation and those received from the state, expended in such a way as would as nearly as possible insure equal educational opportunities in all parts of the county, regardless of the amount raised in any particular part. (Any

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sub-district should be permitted to raise, by taxation or otherwise, additional funds to supplement the county funds, provided the sub-district desired a better school plant, additional equipment, or a more efficient teaching force than could be provided from the county funds).

(4) A county board of education in which is vested the administration of the public schools of the county (except those in independent city districts), composed of from 5 to 9 persons, elected or appointed from the county at large; the board to be non-partisan; the term of office to be at least five years, and the terms arranged so that not more than one-fifth would expire in any one year.

(5) A county superintendent of schools, a professional educator, selected by the county board of education, from within or without the county or state, for a long term (at least two years), who shall serve as the secretary and executive officer of the county board and as such be the recognized head of the public schools in the county (except those in independent city districts).

(6) District trustees in each sub-district of the county, one or more persons, elected by the voters of the district or selected by the county board; to be custodians of the school property and to serve in an advisory capacity to the county board. The expenditures of local funds raised by the sub-district would rest with the trustees subject to the approval of the county board.

(7) The powers and duties of the county board of education:

(a) To select a county superintendent who would be its secretary and executive officer in the performance of all of its other functions; and to appoint assistants as required.

(b) To have general control and management of the schools of the county.

(c) To submit estimates to the regular

county taxing authority of the amount of money needed to support the schools.

(d) To regulate the boundaries of the school sub-districts of the county, making from time to time such alterations as in its judgment would serve the best interests of the county system.

(e) To locate and erect school buildings.

(f) To supply the necessary equipment.

(g) To fix the course of study and select textbooks (using the state course and state adopted textbooks in the states where action has been taken).

(h) To enforce the compulsory education laws.

(i) To employ teachers, fix their salaries and the salaries of other employees.

CONFERENCE ON ATYPICAL CHILDREN.

The program of the Thirteenth Annual Conference on the Education of Truant, Back-



MR. W. L. KUSER,
Superintendent of the Iowa Industrial School for Boys,
Eldora, Iowa.
President-elect of the Conference on the Education of
Truant, Delinquent and Dependent Children.

ward, Dependent and Delinquent Children was unusually strong and interesting. The enrollment was the second largest in the history of the Conference. The attendance reached the highest mark.

The President's address by F. J. Sessions, was a plea for the "Standardization of Child Saving Agencies."

Mr. Guy Hanna, Superintendent of the Indiana Boys' Industrial School and Colonel F. H. Nibecker of the Glen Mills School discussed the subject of "Vocational Training in Boys' Schools." Superintendent H. H. Todd, Principal of the New York Parental School, Flushing, L. I., gave a most interesting and helpful account of the work of his school.

Dr. Helen T. Woolley, Director, Bureau of Vocational Training, Cincinnati, gave a most interesting paper on "The Use of Mental Tests in Social and Institutional Work." She dealt in facts not theories.

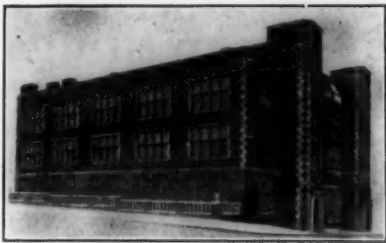
Dr. Eleanor Little, State Training School, Clinton, New Jersey, discussed the value of mental tests in Reformatories for Women.

Supt. A. J. Hutton, Wisconsin Industrial School for Boys, left nothing unsaid regarding the subject of "Industrial Schools for Delinquents."

Supt. Meigs V. Crouse, Children's Home, Cincinnati, gave a profitable review of the progress in "Children's Work in a Third of a Century."

The proper direction of Parole Work of Institutions for Delinquents was ably discussed by Dr. Kenosha Sessions, Superintendent, Indiana School for Girls, and Miss Edith N. Burleigh, Superintendent, Parole Department, Morganza Girls' School.

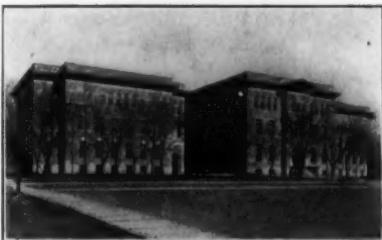
"Canadian Methods in Child Saving" was fully and entertainingly discussed by Mr. and Mrs. William Duncan of the Children's Aid Society, Toronto.



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"A Children's Code" was the subject of a paper by Mr. J. A. Brown, Agent for the Indiana State Board of Charities. Both the paper and the discussion that followed by Judge George S. Addams, Cleveland, were of great value.

The Conference activities closed with a dinner at the Severin Hotel, attended by nearly two hundred members. The local arrangements for the Conference were never excelled.

The following were elected as officers for the next year:

President, W. L. Kuser, Eldora, Iowa.

Vice-President, Miss Amigh Everall, Lancaster, Mass.

Second Vice-President, Solon C. Vial, Eldora, Iowa.

Secretary and Treasurer, H. H. Todd, Flushing, L. I.

Executive Committee: W. L. Kuser, President, Eldora, Iowa, ex-officio; Hobart H. Todd, Flushing, L. I., ex-officio; Miss Edith Burleigh, Lancaster, Mass.; H. W. Moore, Monroe, La.; W. C. Brown, Louisville, Ky.; Elizabeth V. H. Mansell, Trenton, N. J.; Judge W. A. Way, Pittsburgh, Penn.; Stephen P. Streeter, Oakdale, Mass.

months' experience the students have done about the same routine work as a university librarian, except on a smaller scale. The second semester has been devoted to the cataloging and book-binding aspects. A brief description of the general organization of the school will make clearer the nature of the work required of the librarians.

The school has an enrollment of over 600 pupils, grouped in 23 roll rooms, two of which are large study halls. There are six periods per day and the average number in each of the study halls per period is about sixty. The library has never been opened to students before, this being the first year in the new building, as the books were kept in the city library heretofore. The reading tables will accommodate only twenty students and because of this lack of room the two study halls issue permits to the number of ten each at any one period and all who can are urged to take books or magazines back to their rooms. Thus others may take their place and this policy allows a larger circulation. The library is not used for general study purposes, altho we still have trouble in getting students to understand its real purpose—a place for wider reading in English, history, civics, etc.—rather than a place to work mathematics or regular class exercises. The form of student government in use in the school provides for commissioners, and one of the duties of these officers is to issue library permits.

This permit is a 3x5 slip bearing the name of the student, room coming from, room belonging to, and time of leaving. The guides in the halls recognize this permit as entitling the owner passage from room to room. The librarian stamps the slip with the date of leaving the room so that a close check is possible upon the movements of the pupils, even without the aid of the guides.

The school day is divided into hour periods devoted to recitation and supervised study, and students from classrooms are not allowed to go

A Course in Library Training, Eugene High School, Eugene, Oregon

Principal F. A. Scofield, Eugene

The course in Library Training, established in September, 1915, was organized because it was not deemed practicable to afford the services of a trained librarian all the time, and the formation of a class of students to act as assistants was found necessary. This class is under the supervision of the principal and is open to a limited number of juniors and seniors. There is one weekly lecture, and each member of the class serves five hours per week in the library and visits the university and city libraries for such assigned reading as cannot be found in the high school.

The outline of the work which follows indicates something of the value of the work to the student. We believe that the training will at least prepare for library assistants if not librarians, and the knowledge of books and sources of information will prove of great worth to those who intend to take up college work. The ability to help others find the things they want necessarily calls for a knowledge of books and the

use of indices, reference books, newspapers and magazines, books of quotations, debating aids, newspaper clippings and periodical literature, public documents and various institutional reports.

Nature of the Course.

The lecture period is devoted to explanation of routine work for the week, assignments and talks upon phases of library training, arrangement of books on the shelves, classification of books, according to the Dewey system, method of taking books out of library, care and structure of books, and care of the magazine table, are the topics already taken up. The class has spent several afternoons in the university library and each has been given assignments to be worked out there.

All the available books on library training and library management are used as guides in the lecture and classwork, and efforts are now being made to secure the reports of some of the best managed city and school libraries. After two

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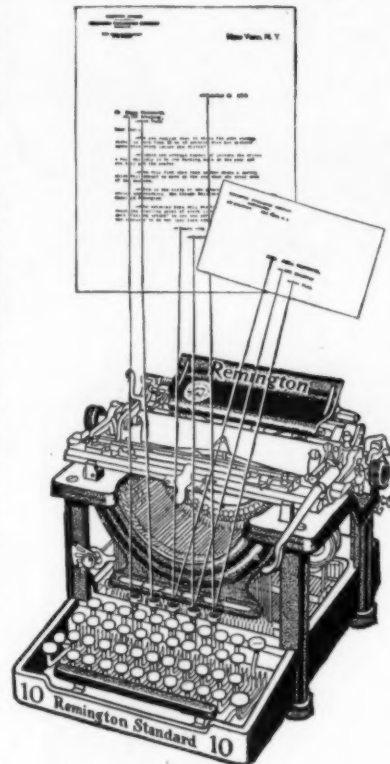
Here is the story in a nutshell. Hand settings of the carriage could never be made by touch. The Remington column selector eliminates them. It supplies instantaneous machine settings for the beginning of every line, including those lines which start at intermediate points on the scale. For the first time it permits the writing of a letter from date to signature without taking the eyes from the copy.

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to the library during the study period. In such cases the teacher notifies the librarians of the books needed and these are taken to the room at the beginning of the period and taken back at the end. These books are said to be reserved by the teacher. Students may reserve books for any period of the day or for home work by signing for it beforehand.

The number of students using library material and the articles they read are checked up each night. This has developed the fact that most of the work so far has been along three

lines: reference work in history; reading current literature without much thought or correlation with school work; and the use of the encyclopedias.

A library bulletin issued early in the year gave instructions as to the card index, the shelf list, author number, etc., stated method of securing books, both for use during the day and for home work, and explained the use of indices in finding material, and how to use the guide to periodical literature. A piece of blackboard has been placed in each classroom, and the librarians

place there notices of new magazines, special articles and library regulations. The presence of the city and the university libraries makes it possible to get much material not available in our own school and it has been the duty of the training class to bring some of this material into circulation. Articles of general interest are indexed and notices are sent to those departments most directly interested. These notes, such clippings as are kept, and all pictures obtained, are later posted in loose-leaf notebooks for the readers. In these books there are several groupings, "history," "language," "industrial," and "commercial," etc. A book for the use of teachers is also being prepared, as well as bibliographies on special topics for reference work. In addition to these duties the librarians handle the book exchange, and sell typewriter paper to the commercial students. The former is on a commission basis, but the paper is sold at cost.

SPECIAL STUDIES.

According to Supt. Edward J. Tobin of Cook County, Ill., \$25,000 was earned by the children of Cook County thru school-home projects.

At the 1916 Achievement Day celebration, held at the Chicago Art Institute, achievement credits were awarded for work done in field and garden, business, cooking and sewing, music, poultry and cow testing. One pupil who earned \$39 for her work with poultry and \$47.63 in garden work, received three credits.

Aurora, Ill. A Go-to-School Week was held recently for the benefit of the school patrons and citizens in general. All departments of the schools were open for inspection and there were exhibitions of the work of the pupils. The first affair of the kind was that given last year, when between 2,500 and 3,000 parents of the children took advantage of the days set apart for visitors.

Mt. Carmel, Ill. A Go-to-School Week was held in the schools. Exhibits of school work were on display and all schoolrooms were open for the inspection of the public. There was also a parade of the students of both the elementary and high schools.

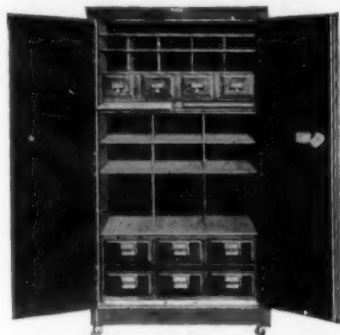


Eugene, Ore., High School Library with Student Librarians at Work.

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WHAT DO YOU LOOK FOR IN A TEACHER?

By a Superintendent's Wife

When you and your community feel that the time has come to erect a new school building, a group of representative men, called the School Board or the Board of Education (according as you are urban or rural), meets and takes the necessary steps to secure the new building.

Perhaps you are one of the committee appointed to select a site. There are three or four places available, at different prices; but the committee feels that this school building is to last for a generation, and it is worth while straining a point in order to get the best site that is to be had.

Then the architects come avisting you. There is one who is especially successful with hotels, another who has put up very fine dwelling houses, but you keep up your search until you find the man who has put up good school buildings.

When the foundation is laid you want it to be the work of a good, honest mason who understands his job. You can't build a wall but you know a good one when you see it; and you want a mason whom you can trust to do good work. You have seen some excellent walls built by Mr. Smith, so you give him the job.

You go thru the same searching process to find a good reliable builder. In receiving bids the board "reserves the right to reject any or all bids," and is just as free to refuse the lowest as the highest offer. After that comes the furnishing and equipment. These and the improvement of the school yard are attended to very carefully. It is a fine building, a credit to the community and especially to the School Board.

Now you are ready to select the new teacher for this new building.

How are you going to go about it? Are you going to give as much thought to the selection of the new teacher as you did to the new site? Yes, I know, that site will last for a generation, but the influence of the teacher will last for all eternity. No teacher can live in the classroom with your children for one whole school year without leaving her influence for all time.

A fine, well-equipped schoolhouse, surrounded by a beautiful lawn and adequate playgrounds is a very desirable thing; but the personality of the teacher in that schoolhouse is by all odds the largest and most far-reaching factor of the entire educational plant; and this is especially true of one or two-room schools.

A man who has given all the years of his mature life to the education and training of young people, said lately, before a body of school trustees, "Probably the greatest thing in all education is the personality of the teacher"; and educational leaders agree with him.

When you selected your mason you looked for a man who could build a good wall; what are you going to look for in a teacher? When architects came to see you, you did not engage one until you *knew* he had proved his ability to put up good school buildings. Are you going to take the pains to be as sure of the ability of the teacher?

Perhaps at first glance, the teaching of thirty children during the hours of one school term, looks like a small job; but it is large enough to call for the very best and highest that any one

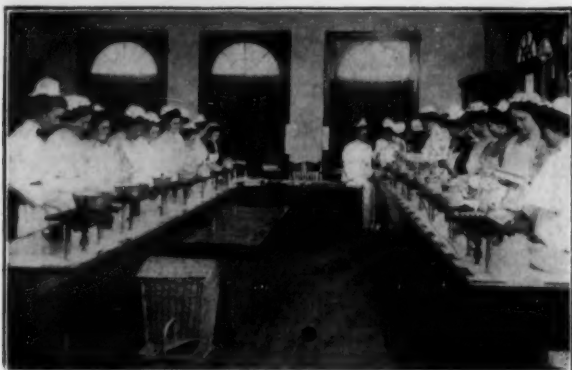
can give, be he a rural school teacher or the United States Commissioner of Education.

"Any job is as large as the man who holds it down"; and the guidance of thirty children can be made a very large and far-reaching job. It ought to be so much more than mere teaching. The inspiration and guidance of a true teacher makes the actual book learning seem like a secondary thing, no matter how ably she hears classes.

If a woman presides in a fine new building and does not teach appreciation and respect for public property; if she has ample supplies for hand work and does not develop the character that comes thru doing a piece of work thoroly and well; if she teaches history and biography as a mere matter of words and never transmits the thrill that comes with really studying a noble deed or a noble life, she is but presenting the husk of things. It is the *soul* of it that counts. Teaching boys and girls to read is a worthy aim, but teaching them to *love good reading* is infinitely higher. Every boy ought to know the multiplication table, but if alongside that, he can be imbued with a fine sense of honesty, it is a higher achievement.

If you want a teacher who will hear twenty lessons a day, lock up her room at night, and give as little of herself as possible, you need not concern yourself beyond securing some one who has the proper certificate. But if you want a woman who will enthuse and inspire your young people, who will in one year raise the tone of your school and your community, you must look beyond the certificate.

Of the two factors the teacher is of vastly more importance than the building, yet she is often selected almost at random. In one of our districts a millionaire resident gave to the town



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Established 1868

a school building costing \$100,000. This very winter that School Board composed of intelligent professional men, engaged at least one teacher for that building without any knowledge of her ability except the formal records of her certification.

In another community a citizen was indignant because the School Board had engaged a teacher without any personal investigation. In his anger he said: "Why, there isn't one of you men that would buy a pig without first seeing it; but you'll engage a teacher to have charge of our children a whole year without even knowing if she's black or white." Perhaps his language was a bit direct, but wasn't it true?

Why not use the test you applied to the mason—has she proven that she can teach a good school? The way to find out is to visit her at work if possible. Nothing else can take the place of a personal visit to the teacher in her classroom. And if you go there what are you going to watch? Will you judge by the number of pages her reading class covers in a period, or the list of unusual and meaningless words the pupils can spell? No, you are going to observe the school spirit, the pupils' attitude toward each other and toward the teacher, her attitude toward them, the air of business and of systematic activity or the lack of it—the general tone of the school.

In the teacher herself personality is the important consideration. On the physical side good health is very desirable, not so much because the frail or sickly girl is likely to lose time during the school year; but because the healthy robust girl or woman is better equipped to do good, thoro work, and to have a good effect on the physical well-being of the children. The healthy girl will be more likely to have good poise, a cheerful voice with a ring in it; she will

be more apt to join the pupils on the playground and the young people in country rambles. If you visit a teacher who speaks to the pupils with a hint of impatience or sarcasm in her voice, if the corners of her mouth droop, if she has a clear-cut, steel-spring manner, beware. If you are ill at ease in her presence, always conscious of her critical attitude toward you and her pupils, she is not the person you are looking for. You are a mature man, subject to no rules of hers; and if her effect on you is chilling, think what it must be to the children, who are obliged to be subject to her authority for a year.

There is a tide in the affairs of boys and girls as well as of men; and the trend of a boy's whole future life can often be vitally influenced by the teacher he has, especially during the critical period of the seventh and eighth grades. If she is fault-finding and unsympathetic she can drive him out of school and end all desire for further education. But if she is the fine woman she ought to be, she can generally arouse in him an ambition that will bridge these critical years and carry him thru high school and college. I am not theorizing; I have seen both these results many times. A severe teacher will blight the souls of children just as surely as frost blights tender blossoms. If we were to work back to the real cause that sent a lot of surly, rebellious boys to the reform school, I'm afraid we would find at the end of many a quest a nagging mother or teacher.

Children have a right to a happy childhood. They will meet the burdens and responsibilities of life all the better for it; and if you, by "giving thought" can procure them happy, cheering, uplifting influences during their school life you have given them something that cannot be taken away by all the buffetings that later life may bring to them.

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CHICAGO

"No magnet can draw like human sympathy." The child who goes to a teacher for this bread of sympathy and gets a stone of harsh criticism is cruelly wronged, and if you, by indifference or carelessness put that unkind teacher over the children you are to blame.

It ought to be natural for a boy to consider his teacher just about the best person he knows. But if he studies the gospel of kindness on Sunday and meets nothing but criticism and waspishness on Monday, how can he square things?

When you have found the teacher you are seeking, the one who has shown that she can conduct a good school, do what you did with the best school site—pay the price. If it is a question of taking a second rate teacher or of raising your price to procure the woman who has proven her ability, take the best. I am not pleading for higher salaries for teachers—others do that a-plenty—but I am pleading for the very best for your children.

You are proud of your new school building and you have a right to be. But do you properly value the boys and girls in that building? If you do, give most careful heed that they shall have the benefit of a good teacher. They will respond in the right way if they have the right leadership.

St. Louis, Mo. A survey of the public school system has been begun by Dr. Chas. H. Judd of the University of Chicago. Dr. Judd is assisted by State Supt. H. C. Morrison of New Hampshire, W. F. Dearborn of Harvard University, Frank N. Freeman, University of Chicago, J. B. Cragun of the University of Chicago, G. B. Meredith of the Department of Education of New Jersey, William S. Gray, University of Chicago, S. O. Hartwell, Muskegon, Mich., and J. F. Bobbitts, University of Chicago.

The survey, which will cover a study of the school buildings, degree of efficiency and cost of operation, will cost about \$10,000.



Did You Ever See An Easier, Cleaner and Quicker Way To Clean Erasers?

The old way of cleaning erasers--pounding them together or against the back of the schoolhouse--was anything but satisfactory. It took too long and was an unpleasant task and when the job was done the erasers looked so dusty and chalky that they were hardly fit to touch. And besides, it was impossible to get them clean. Whenever they were used on a clean blackboard, they left a chalky path and chalk dust went flying all through the room. But now all that is changed by the

DUMORE

Eraser Cleaner

With the Dumore, it's fun to clean erasers. A rapidly revolving brush loosens the dust, and suction developed by the motor, draws all of the dust particles from the surface and out of the crevices of the felt.

A few movements of the eraser and it is thoroughly cleaned. There is no flying dust--the erasers can be cleaned right in the schoolroom. All of the dust is drawn into a receptacle and the air created by the vacuum action is filtered before it comes out of the exhaust.

Your schools need the Dumore. It means clean erasers, a clean blackboard and air that is free from chalk dust. The Dumore is a first-quality product and it looks the part. Made of birch with mahogany finish. Equipped with Universal Motor (direct or alternating current). All metal parts are heavily nickel plated.

A Dumore Eraser Cleaner will be shipped on approval to any accredited superintendent of schools. Have us send you one on thirty days' approval.

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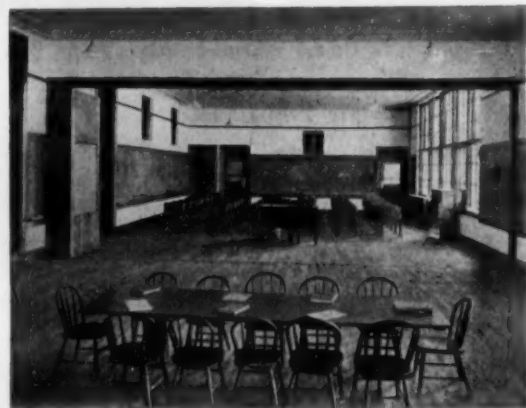
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PARTITION EXTENDED

BETTER AND SAFER SCHOOL BUILDINGS.

A distinct contribution to the propaganda for safe school buildings has been made recently by Hon. James R. Young, State Insurance Commissioner for North Carolina. By virtue of his office Mr. Young is ex-officio Fire Marshal of the state and has imposed upon him the duty of working for the improvement of buildings in the direction of fireproofing and general safeguarding against fire.

In the opinion of Mr. Young it will pay communities financially and educationally to erect a better class of school buildings. The frame buildings of more than one-story should be no longer tolerated. No brick buildings with ordinary wood construction for floors and partitions should be erected in the future. Mr. Young urges that where absolutely fireproof construction is impossible, mill construction should be employed and safeguards in the way of fire-stops and automatic sprinklers should be employed. He calls attention to the significant fact that the better class construction will be made up in cost in a very few years by the difference in the cost of repairs and insurance.

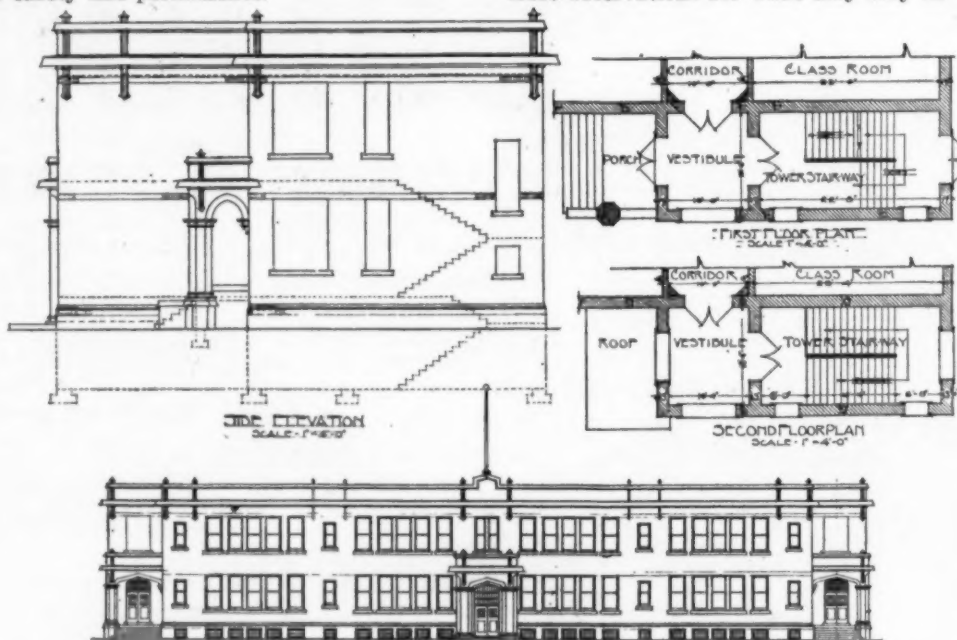
Mr. Young finds in schoolhouses two dangers. The first is the rapid spread of fire and the second is the danger of smoke panic. The former of these dangers can be obviated by safe construction. The second can be removed almost wholly by discontinuing the present type of open stairways and by substituting therefor tower stairways which are cut off from the balance of the building by a fireproof partition and fireproof doors.

To illustrate the recommendation which he has made to school boards thruout the state, Mr. Young has had drawings made of a typical tower stairway and of a school building to which tower stairways have been applied.

The main features of the stairway are as follows: The stairway is enclosed wholly in fireproof walls and is constructed of fireproof mate-

rials. Admittance to it is gained thru a tower vestibule which is separated from the building, corridor and from the stairway proper by sets of steel and wire glass doors. Both the vestibule and the tower have openings which cannot be closed and which will at all times keep the vestibule and the tower free from smoke. The accompanying illustrations will make clear the general arrangement and equipment of the stairs.

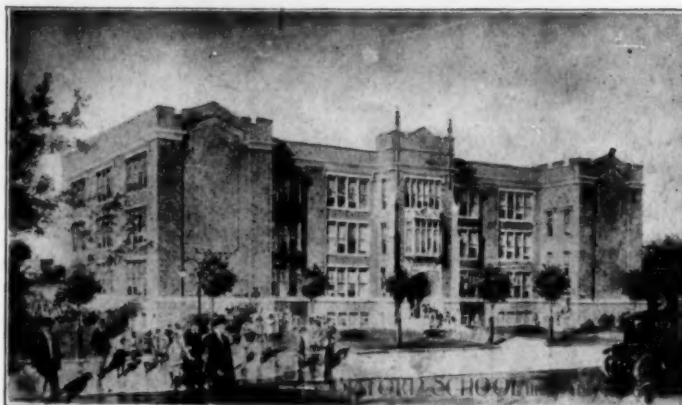
It is Mr. Young's opinion that the use of tower stairs will not materially increase the cost of school buildings, but will add immensely to their safety and permanence.



ELEVATION AND DETAIL DRAWINGS
SHOWING THE APPLICATION OF THE
DOUBLE TOWER STAIRWAYS
IN A MODEL ELEMENTARY AND HIGH SCHOOL BUILDING
AS RECOMMENDED BY JAS. R. YOUNG
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After thorough investigation this system was chosen in preference to all others.

1. Because it positively delivers enough fresh air to completely change the air in the schoolrooms every seven minutes.

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The AMERICAN System of Ventilation is thoroughly practical for schools of all sizes. It places positive, efficient ventilation within the resources of any School Board.

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TRADE MARK

THE WRITING TEST IN THE SALT LAKE CITY SURVEY.

John O. Peterson, Supervisor of Writing,
Tacoma, Wash.

The writer makes bold to offer some suggestions and conclusions, regarding the writing test in the Salt Lake City Survey, as published in the Report of the Survey Committee. While the writer lays no claim to being a scientist, he is in practical touch with modern methods of teaching writing as well as with the demands that are placed upon handwriting in business and in the schoolroom, and offers these observations for what they may be worth:

Egshelcote Your School Walls Make Them Beautiful, Durable, Washable

Patek's Egshelcote is a permanent, elastic, washable, dull-finish oil paint



Patek's Egshelcote meets every requirement for interior school walls

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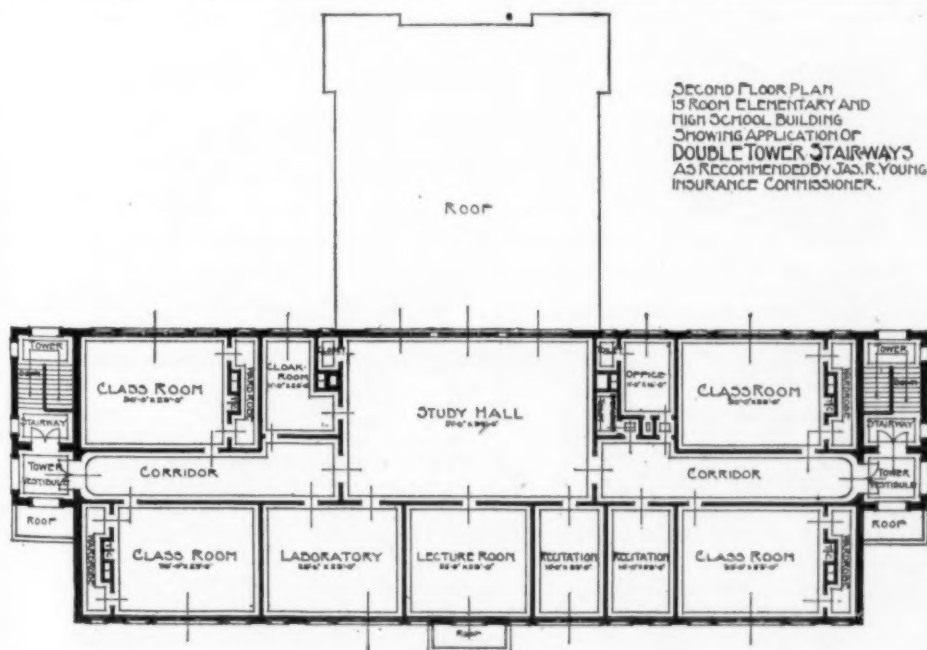
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USED NATIONALLY IN SCHOOLS WITH SATISFACTORY RESULTS

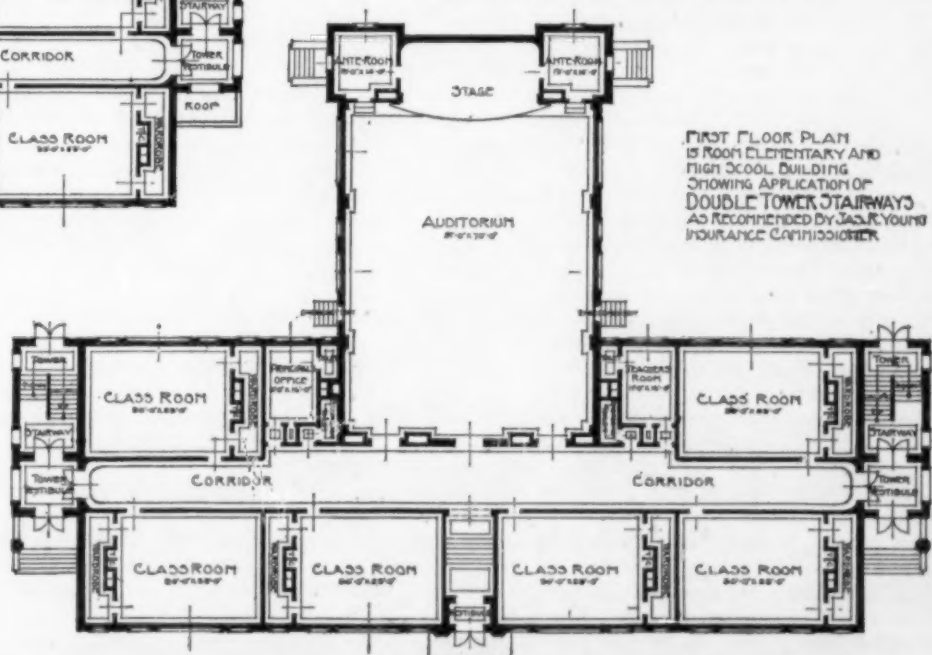
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the wide variation in scores made by different pupils in the same room. The report in itself is entirely justified by the facts revealed in this one table. The fact that many children in the third and fourth grades write as well as the average in the eighth grade, and that many in the eighth grade write no better than the average in the third grade are conditions which should compel the attention and efforts of every school principal and every writing supervisor. That these conditions are not existent in Salt Lake City alone but that they are widespread thruout the country goes without saying. That they are not now receiving their due share of attention from principals and supervisors is also true. The report is to be

The report of this writing test, as published, shows that a great deal of time, thought and effort were consumed in conducting the test and that the data gathered has been well classified. While the report shows no data for the first and second grades, it does state that writing is begun with free arm movement at the blackboard in the first grade, gradually taking up the pencil, and in the third grade, the pen. This is in line with the best pedagogy, and an actual measurement is not of such great value in these grades since we are here more concerned with the manner in which primary pupils write than with how well they write. In Table No. 21 of the report, some valuable and suggestive information is given, namely,

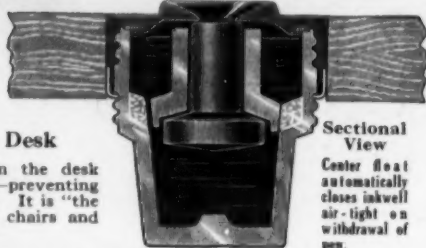


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Sengbusch Self-Closing School Inkwell No. 50



"The Inkstand is a successful invention, and will satisfy any school system. It prevents the losses by evaporation and, therefore, keeps the ink clean and of the right thickness. It is an economical solution of a most difficult problem of school management."



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A metal ring safely installed in the desk keeps the well securely in place—preventing noise, jarring and spilling of ink. It is "the inkwell" you want for movable chairs and adjustable desks.

Sectional View
Center float automatically closes inkwell air-tight on withdrawal of pen.

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Write us today to send you a sample of the No. 50 School Inkwell to try it on your own desk.

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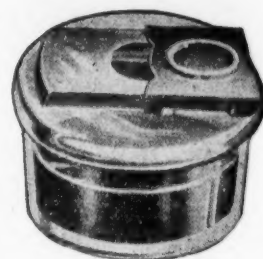
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commended because it not only reveals this condition but prescribes the remedy.

That the Survey Commission should have expended so much time and effort in measuring but one phase of writing is to be regretted. Either the parties conducting the test were not conversant with some of the principles of modern penmanship requirements, or, what is more likely, they ignored them without giving any apparent reason for so doing.

How well the average child can write cannot in any true sense be measured by a standard of legibility alone. If legibility were the sole requirement, time and effort consumed in teaching a running hand would be wasted. The extreme of legibility would be attained by permitting the pupils to print the letter forms. This was largely what happened in the vertical writing systems of a few years ago, and the fact that all emphasis was laid on legibility and nothing else is the sole reason for the short life of the vertical writing systems. Handwriting, to be of practical value, must contain a certain element of speed as well as the element of legibility, and the best handwriting is not that which scores highest in legibility when compared to a chart, however that chart may have been constructed, but that which is at the same time most legible and most rapid. No one would reasonably contend that a pupil writing an average of eighteen words a minute for fifteen minutes, with little or no physical strain is not a better penman than a pupil who writes an average of twelve words a minute for fifteen minutes and suffers a physical and nervous strain, provided that both pupils write equally legibly, and provided that with proper instruction the slow writer could have been taught to write as rapidly and as legibly as the fast one.

In the next to the last paragraph of the report, this statement appears: "It is true that some of the writing was done with a cramped hand, and that it is somewhat childish looking,

but it must be added that it is easily legible and that legibility is the final test which the world puts upon writing." It is to this statement that we wish to take exception and, while we admit that the writing as shown by the specimens published in the report are easily legible, we have never heard it argued that the writing which the pupils do in the schoolroom is not legible. The criticism that used to be directed to the handwriting taught in the schools was that the writing which the pupils did after leaving school was illegible. This was due largely to the fact that in the schoolroom the pupils were permitted to write as slowly as was necessary in order to make the writing perfectly legible and no effort was directed toward retaining the legibility and increasing the speed. The fact that most pupils' handwriting became an illegible scrawl shortly after they left the schoolroom, or after they entered the high school was due largely to this condition. The pupils wrote slowly, with emphasis on legibility alone. This was very well in the schoolroom but the handwriting thus developed did not stand the strain when called upon to meet the requirements of the high school or of business conditions where speed is a requirement almost on a par with legibility. We contend, therefore, that a true writing test should measure the speed at which the writing is done as well as the legibility.

In the test under discussion, this could have been done with but very little added effort. If the teacher conducting the test had stood at the blackboard and marked the time in half-minute intervals, while the pupils were writing, and instructed each pupil to copy the first figures she wrote after he completed writing the paragraph, it would have been possible to have taken into consideration the number of words per minute at which the test was written.

The specimens published in the report indicate that they were nearly all written with a cramped position of the hand. The report also

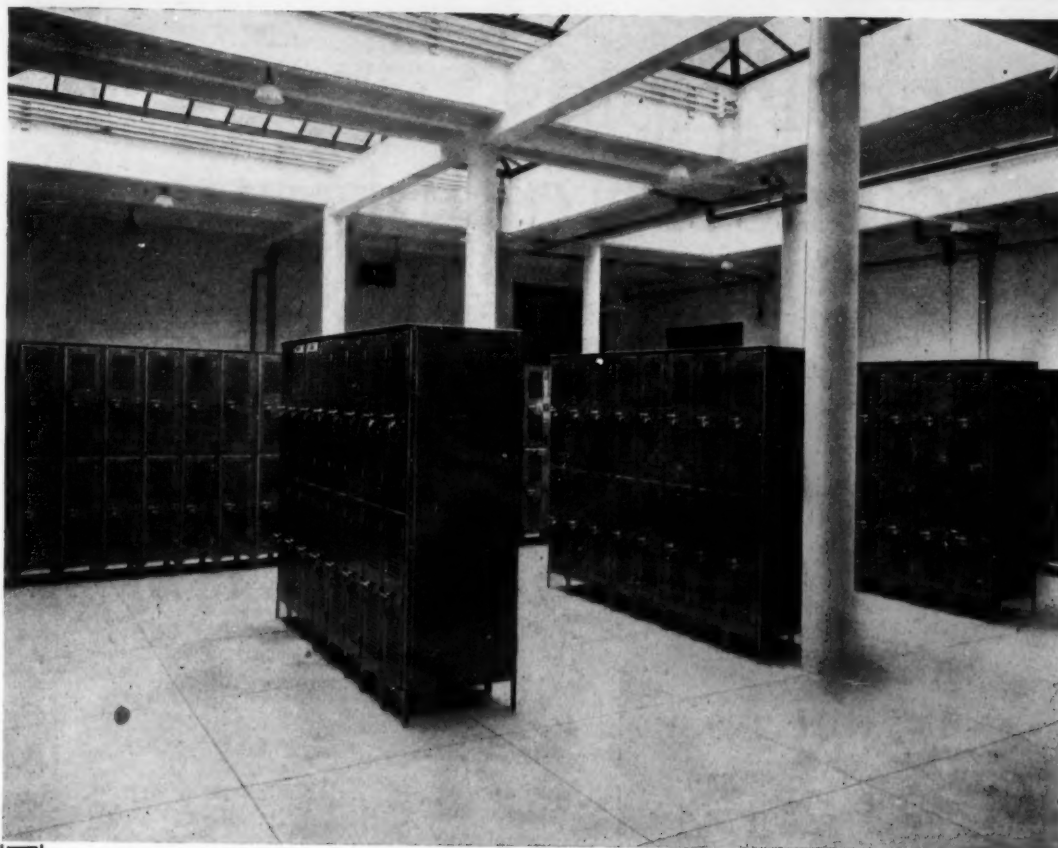
states that these samples fairly represent the kind of writing which is now being done by the average children of each grade in the city. If this is true, then one would judge that at least a very large proportion of the pupils still write rather slowly and that if they were required to write for any prolonged period, the quality of the writing would rapidly deteriorate. However, it would not be fair to draw these conclusions from the few specimens alone submitted. It is natural for the modern penmanship instructor to infer from these specimens, however, that if the handwriting had been measured with regard to speed as well as legibility, the standings and ratings, as shown in the charts, would have been materially changed.

It is a comparatively easy matter to teach pupils to draw letter forms by writing them slowly. This was formerly construed as teaching writing. Under modern conditions, it is so no longer. Modern handwriting is executed with relaxed muscles and with a large reserve amount of motive power. This is accomplished by properly adjusting the hand and arm, which constitute the writing machine, and by utilizing the driving power of the large muscles of the arm.

Scientific research has brought out the fact that in nearly all trades there is a best way of performing any muscular act. The execution of handwriting is a muscular act, tracing an image in the writer's mind. Certainly before attempting to use a machine a pupil should be instructed and trained in the proper manner of using it. Thereafter the product should improve as he becomes skilled in using the machine and as he learns to perceive with nicety the better qualities of the article produced.

In the teaching of handwriting, we may conclude, therefore, that the muscular training should precede the actual teaching of an accu-

(Concluded on Page 54)



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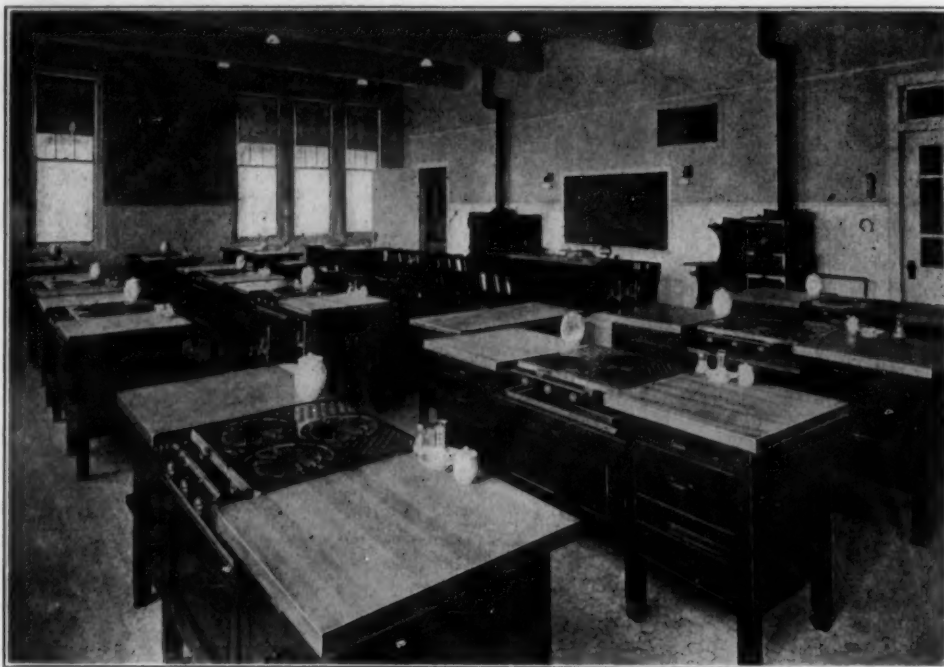
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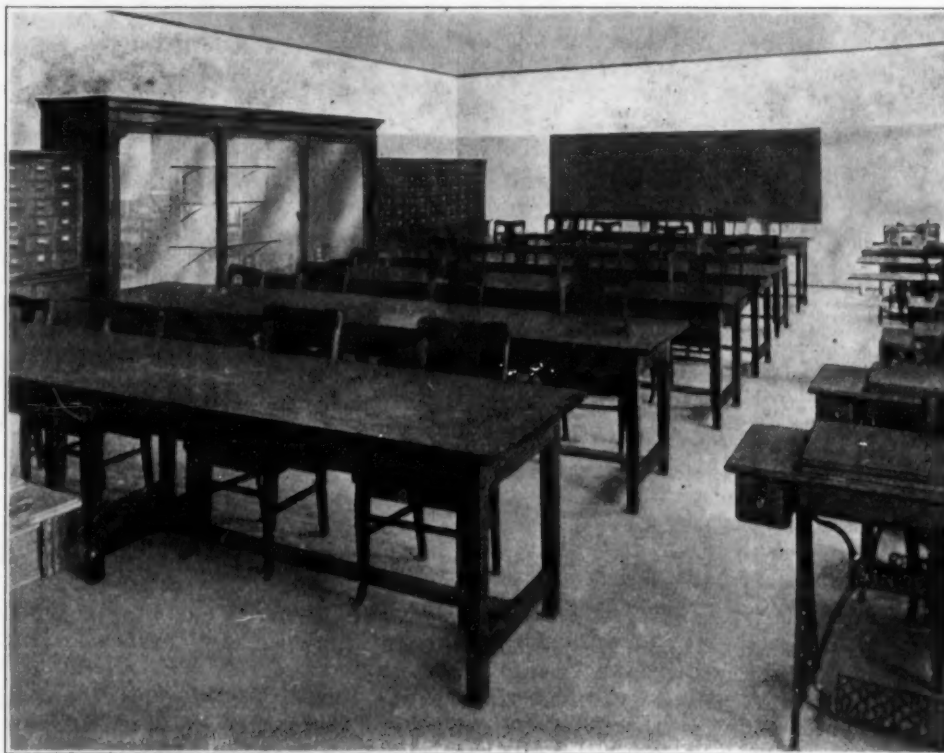
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Normal School.....Mt. Pleasant, Mich.
Normal School.....Kalamazoo, Mich.
High School.....Ypsilanti, Mich.
University of Michigan.....Ann Arbor, Mich.
High School.....Allentown, Pa.
High School.....Binghamton, N. Y.
Two High Schools.....Erie, Pa.
Schenley High School.....Pittsburgh, Pa.
High School.....Shamokin, Pa.
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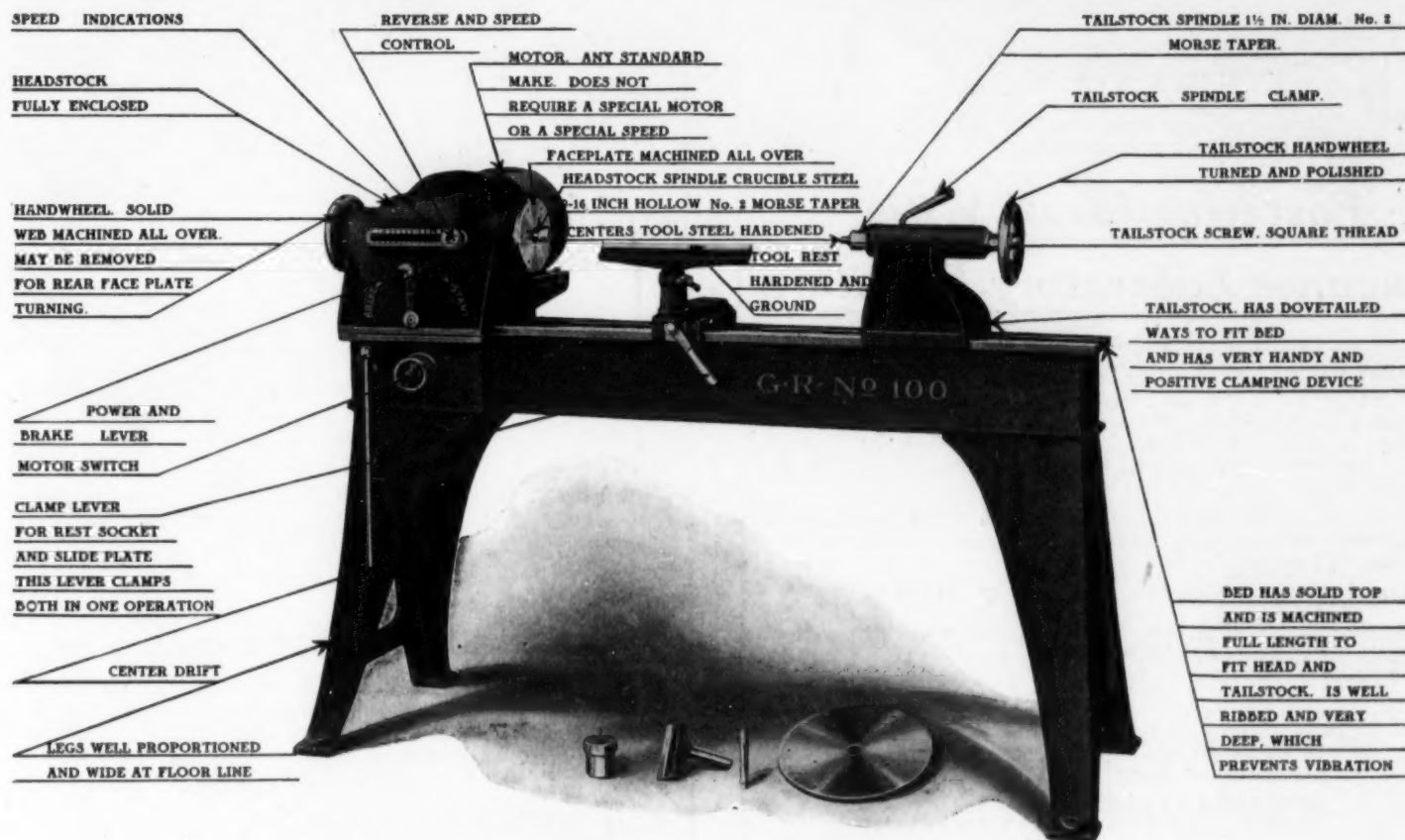
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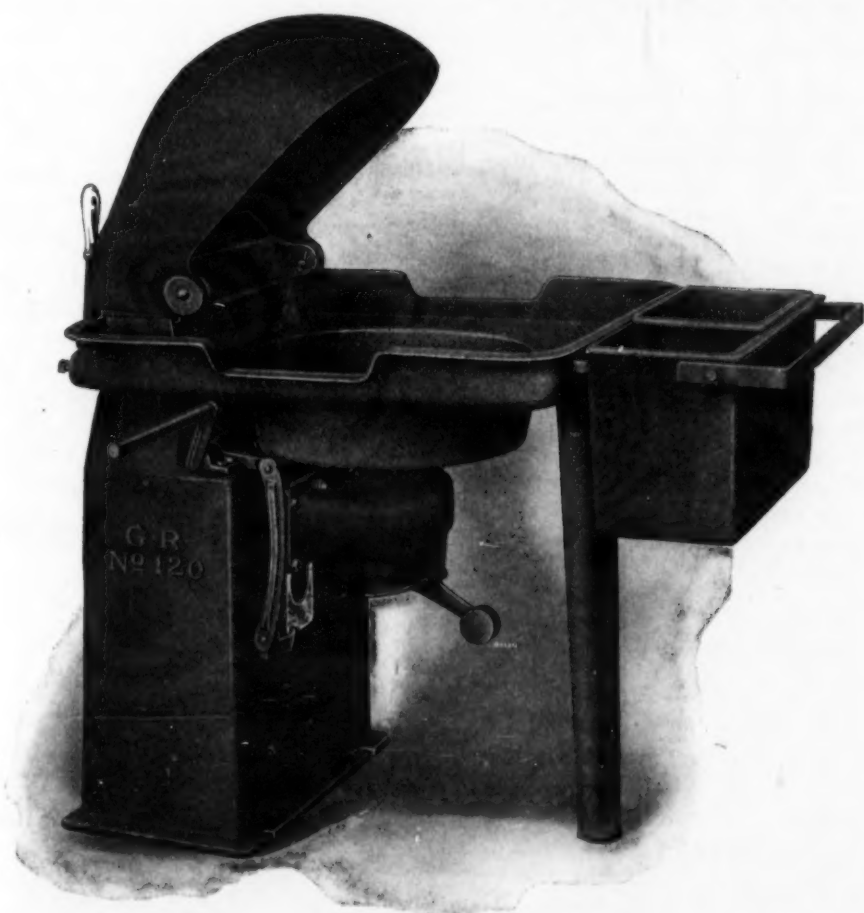
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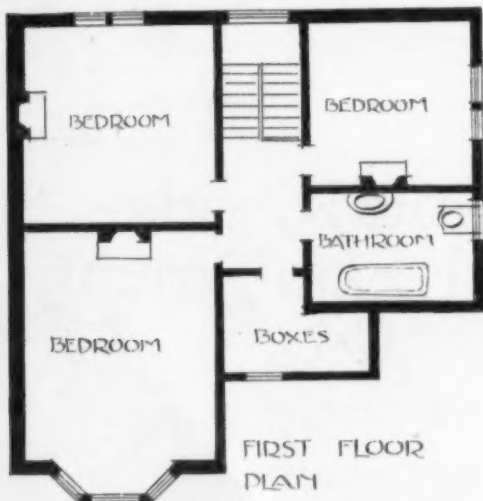
E. H. SHELDON & COMPANY, Muskegon, Michigan

Rural Teachers' Houses

John Y. Dunlop, Esq., Craighead, Glasgow, Scotland

In England it has been the custom for many years to erect, in connection with rural schools, teacher villas, and these, whether on a combined plan or erected near the schoolhouses, have no doubt well paid the communities for their enterprise.

Lack of suitable boarding accommodations is one of the most serious difficulties in the way of securing suitable teachers for country schools. Where there is no accommodation for housing teachers, rural school advertisements for teachers receive scant replies, and it has been found from experience that it is almost impossible to get teachers of the highest type to remain in the country when they must "board around."



TEACHERS' SEVEN-ROOM HOUSE.

At one time, farmers' homes were looked to to provide shelter and board for teachers during the school session. In many districts, however, the accommodations at the steadings are very limited and often the kitchen, living room and dining room are combined in one and no heat is provided in other rooms in the house. It will be readily understood that such surroundings were not congenial for teachers who wanted to spend a part of their time each evening in preparing school work. Where teachers have been compelled thru circumstances, to spend their entire time in the living room with the farmer's family, they have had no opportunity to study properly and have sometimes been drawn into neighborhood gossip to the detriment of their teaching influence. It is because of these difficulties that landward school boards never think of a rural schoolhouse without a teacher's residence.

The Ordinary Requirements.

The English board of education has adopted a set of rules to assist school boards and their architects to design and erect compact, convenient and economical school villas, according to their needs. These rules require that the teacher's home must contain a parlor, a kitchen, a scullery and bedrooms. The smallest dimensions which can be approved are:

Parlor, 12 feet by 12 feet.

Kitchen, 12 feet by 10 feet.

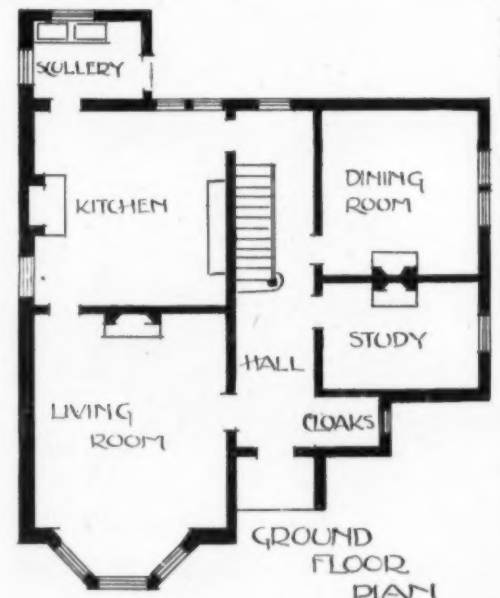
One bedroom not less than 12 feet by 10 feet.

One bedroom not less than 9 feet by 8 feet.

Minimum height of ceilings, 8 feet to wall plate; and 7 feet to wall plate and 9 feet to ceiling where there is a cove ceiling.

The house must be planned so that the staircase is immediately accessible from an entrance lobby and from the parlor, kitchen and each bedroom, without making a passage of any room. Each bedroom must have a fireplace. The parlor should not open directly into the kitchen or scullery. There should be no internal communication between the residence and the school. Windows should be carried up as near to the ceiling as practical. There should be a separate and distinct yard with office.

Apart from these simple rules, the architect is advised to make a thoroughly comfortable house. Every room must be planned by itself and for its own use, and the designer is advised to plot upon his plan the disposition of the furniture.



TEACHERS' SEVEN-ROOM HOUSE.

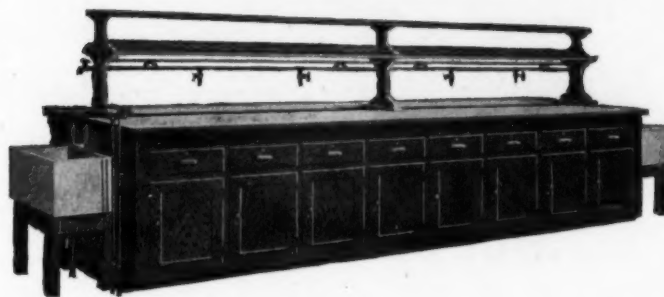
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For the ordinary residence for a Master or Mistress, what is wanted is a plan based on symmetry, simplicity and compactness.

Halls and Living Rooms.

In all the teachers' villas which I have visited, the plan of the house begins with the hall, that is to say, the entrance passage and staircase. These arterial lines of thoroughfare can be clearly distinguished in the accompanying plans. On the ground floor they lead from the front entrance thru the hall and to the garden door. Upstairs the travel proceeds from the staircase to the bedrooms and to the bathroom.

One of the chief considerations in this part of the house is the lighting of the hall and stair-

case, which is accomplished either by wall windows or lights in the ceiling. The staircase is usually made airy and adds indispensably to the comfort of the house.

In the houses which are most valued by teachers the primary living rooms are a dining room for meals, a drawing room for ladies and a supplementary room for meetings on community matters.

In rooms intended for those purposes the board of education has decided that there are three features in the plan to be considered, namely, the fireplace, one or more windows and the door. Generally speaking, all the fireplaces are to be found in the middle of one or other

of the sides of the room. The window, or windows, are placed in the middle of one or the other sides, and the door on a side at right angles to the window.

The Study and the Bedrooms.

In the house of seven rooms, which is shown, a small study is included in the plan. Properly it might be called a bookroom, as it is fitted with bookcases and furnished with a writing desk. In most teachers' houses, a similar room is intended for a workroom as country teachers must often take register and session clerk work in the district.

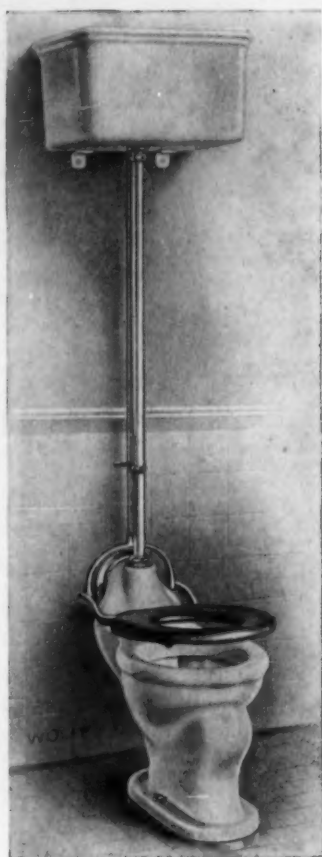
The bedrooms are, as a rule, not very large, but they are mostly planned on comfortable



A SEVEN-ROOM TEACHER'S COTTAGE.
(See plans on page 50.)



A FOUR-ROOM COTTAGE FOR A TEACHER.
(See plan on page 52.)



“Wolff Solidon” Closet for Schools and Institutions

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Its automatic operation is simple and satisfactory. The wash-down, jet bowl has a large, local, Boston Vent which meets the most exacting requirements of sanitation.

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lines. In each, due consideration is given to the three features in the living room, with the addition that a proper place is set apart for the bedstead. Near the bedrooms is the bathroom, which is recognized in this country as an indispensable supplementary in a teachers' house. It

The cost of the houses shown varies somewhat according to the material and the accommodations. In the case of the combined school and teachers' house, the cost was 10£ per pupil, which includes everything, less site and furnishings. The furnishings cost about ten shillings per pupil. This works out at 3600£ for school and teachers' house or a total of 3780£ including furnishings. The house itself, if built alone, would cost six pence per cubic foot, or

about 600£, after making a deduction for the teachers' room included inside the same wall.

The seven-room house cost 680£. The small difference is due to the fact that one is built with ashlar masonry on all sides, while the other is of cement and cement-and-timber.

The house of four rooms cost 380£ and is an ideal house for a country district. It is built of brick thruout, and is covered with a slate roof and tile ridge. (Concluded on Page 54)



FLOOR PLAN, TEACHERS' FOUR-ROOM HOUSE.

is generally a small place, well lighted and ventilated, and provided with a hand wash basin and a porcelain enameled tub provided with hot and cold water. The hot water for the fittings is supplied from the kitchen range by a small boiler and storage tank. The water closet is also placed in this same apartment.

Cost to Community.

School districts are at all times permitted to borrow money for the building of teachers' houses. The amount can be borrowed either from the department or in the open market.



THE NETHERCRAIG'S SCHOOL. COMBINED SCHOOL AND TEACHERS' FIVE-ROOM HOUSE.
(See page 54.)



VACATION
TIME

REMODELING
TIME

NOW is THE TIME to PREPARE

For the Installation of New
Water Closets, Urinals, Lavatories
Drinking Fountains, Etc., Etc.

On the subject of Water Closets the following will be interesting:

Saving Water

In 1908 the Shortridge High School, Indianapolis, Ind., was equipped with rod-acting water closets. In August, 1909, the change was made to Clow automatic closed tank water closets. In all, forty-eight (48) water closets were installed. The summary below shows the consumption of water in gallons, and in dollars and cents for the years 1908, 1909 and 1910. The latter year, nothing but Clow automatic closets were in use.

SUMMARY

1908—	14,392,500 gallons, at a total cost of \$863.55
1909—	8,610,000 gallons, at a total cost of 516.60
1910—	3,172,500 gallons, at a total cost of 190.35

A SAVING OF FIFTY PER CENT TO EIGHTY PER CENT



M-1860 "Nouveau J"
With Exposed Tank
Madden's Patent



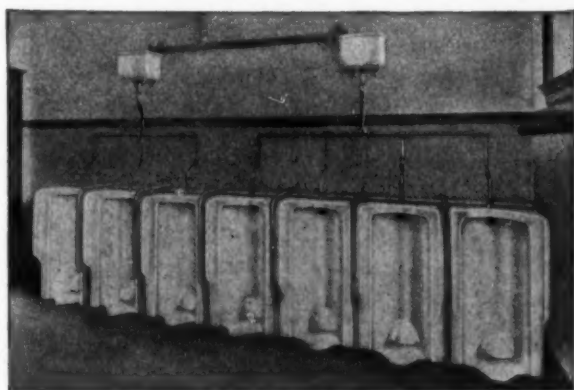
R-735 Bubble Drinking
Fountain
Madden's Patent

DRINKING WATER

THE CLOW MADDEN PATENT BUBBLE DRINKING FOUNTAIN IS LAW PROOF AND GERM PROOF, NO METAL EXPOSED, NO PART THAT CAN BE TAKEN INTO THE MOUTH. FURNISHED WITH SELF-CLOSING VALVE OR REGULATING VALVE FOR CONTINUOUS FLOW, USING A MINIMUM OF WATER.

URINALS

Solid Porcelain with the Clow Madden Patent Automatic Pan Tank. Only one moving part, nothing to get out of order. Saves water, repairs and annoyance.



Clow Solid Porcelain Urinals

LAVATORIES

Clow Adamantose Lavatories have the strength of iron, the beauty of china. They are easy to keep clean.



Clow Adamantose Lavatories

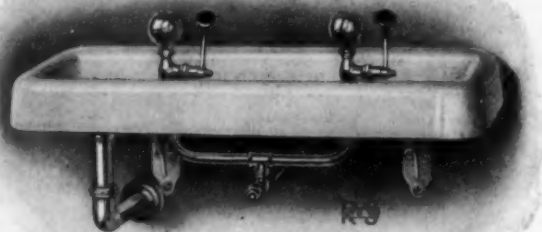
DELIVERIES

BECAUSE OF THE UNPRECEDENTED BUSINESS REVIVAL THE DEMAND FOR PLUMBING FIXTURES AND MATERIALS IS HEAVY AND INCREASING. WE, THEREFORE, URGE THAT, IN ORDER TO INSURE DELIVERIES ON TIME, CONTRACTS AND ORDERS BE PLACED EARLY.

Consult with your Architects and your Plumbers now—or write to us

JAMES B. CLOW & SONS, CHICAGO

Sales Offices: New York Detroit Milwaukee St. Louis Denver Works: Chicago, Ill. Newcomerstown, Ohio
Minneapolis Los Angeles San Francisco Coshocton, Ohio



Rundle-Spence Bubblers for Superior Quality

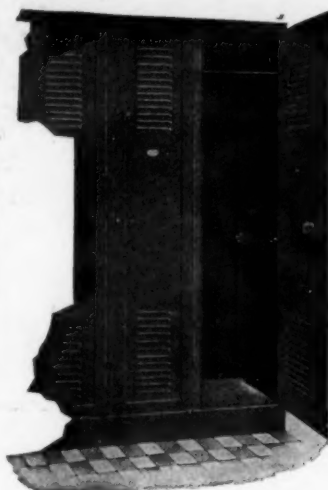
If you want fixtures in your school that stand for superior quality, that will give the best service, be sure to install RUNDLE - SPENCE BUBBLERS. They are correct in design from the stand point of the sanitary engineers with strength and solidity built right into the construction.

Rundle-Spence Bubblers

are attractive and the outlines are perfect so that they will conform with the neatness and attractiveness of your school.

A booklet telling all about our fixtures will be sent upon request. WRITE TO-DAY.

RUNDLE-SPENCE MFG. CO.
52 Second Street MILWAUKEE, WIS.



Here's a Locker That Affords a Clean Ventilated Place for Clothes

This Locker is especially adapted for school use. Helps to keep the children's clothes in a clean orderly condition. Insures promptness, neatness, and is a factor in the prevention of contagious diseases.

This locker includes four separate hangers, a shelf for small articles, a place for rubbers, overshoes, etc. It is entirely of steel, and has a beautiful baked enamel finish.

HESS STEEL CLOTHES LOCKERS

will surely meet with your approval. We could say they are exactly what you are looking for, but how should we know? How do you know, unless you see the locker? This is what we will do. Send you a sample locker, "Free of Charge." All we ask you to do, is to examine the construction, finish, re-enforced corners, locks, and pivot hinges. Then return the locker to us, all at our expense. Simply drop us a post-card—we'll do the rest.

Hess Warming & Ventilating Co.

Milwaukee Office:
40 MARTIN ST.

1222 Tacoma Building
CHICAGO

(Concluded from Page 52)

The choice of material for the building fabric in these three designs was entirely governed by the local market. This idea prevails thruout the whole of England. Stone is used in a stone district, brick where brick is made, and where both these materials are scarce, concrete is used.

Free House, Coal and Light.

One of the inducements in this country to the

rural teacher is to be able to live in the country, and when a position includes free house, coal and light, there is, as a rule, no end to applications for appointment. Not that the teacher expects to get the same salary as the city teacher, plus the extras referred to. Most country school boards reduce the salary by a small sum for the use of the teacher's house. If the community has erected a house at say, 500£, it

is entitled to recover sufficient to pay the tax, interest on the investment, upkeep and other expenses.

Ample coal is usually supplied to the teacher for heating and cooking. Light is another item which is granted free, altho in some districts a limit of expense is set by the school boards. Such renovations as may be required from time to time, are made at public expense.

The teacher's cottage has become an important feature in the administration of rural schools because the people take a decided interest in it. They feel that the teacher's presence has a marked influence upon the community and that this influence is broadened and strengthened when the teacher lives in a model dwelling and works under the most wholesome conditions.

The Writing Test in the Salt Lake City Survey.

(Concluded from Page 46)

rate letter form, until the proper muscles are sufficiently well controlled to execute a usable letter. Thereafter the writing movement and the accuracy of the letter form should improve on a par until the established standard as to speed and accuracy is obtained. It is not always wise to stop as soon as a usable standard is reached, for in this, as in all other acts of physical skill, ability tends to recede as soon as training stops. It is advisable, therefore, to train beyond the stage which one hopes to retain as a standard.

Table No. 21 in the report gives a medium score of 12.8 for the eighth grade. Under the Thorndyke Scale, allowing a difference of one hundred between Quality 4 and Quality 18, a score of 12.8 would indicate a score of 62½ per cent. While the report indicates this score as fairly satisfactory, it is a lower score than one expects in most other subjects. We believe that this is a rather low standard and that the medium score in handwriting should be at least as high as the medium score in other subjects.



The Nethercraigs Schoolhouse. A Combined Rural School and Teachers' Dwelling.
(See plans on page 52.)

GLAUBER BUBBLERS ARE SUPREME—BUY THEM

When you buy drinking fountains and bubblers you have but one object in view,--- to provide **permanent** protection against the dangers of the common drinking cup.

It is a notorious fact that most bubbler manufacturers have overlooked this. They have made bubblers that are **not sanitary** and which because of mechanical imperfection can give even their poor service only a short time. The need of care in the selection of bubblers is at once apparent.

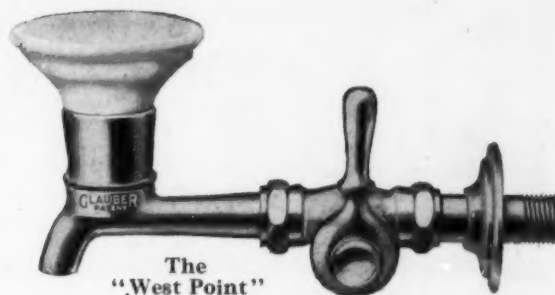
JUST A FEW OF OUR LEADERS---OUR LINE IS COMPLETE



"The Princeton"
Patented and Patent Pending
The "Princeton" Combination self-closing basin cock and bubbler drinking fountain.



"The Harvard"



The
"West Point"

Sanitary Mechanically Perfect Guaranteed for Five Years
Our line includes bubblers for lavatories, sinks, pedestal fountains, wall fountains, and a *perfect* rural fountain.

Send for Catalog and Prices NOW--- Obey That Impulse!

GLAUBER BRASS MFG. CO., Cleveland

NEW YORK

CHICAGO

ST. LOUIS

SAN FRANCISCO

PROTECTING SCHOOLHOUSES AGAINST FIRE.

An interesting feature of the opening session of the National Fire Protection Association, held in May at Chicago, Illinois, was the round-table discussion on safeguarding school children and school property against fire.

The topic was divided into two sections, namely, planning school structures for safety, and caring for school buildings. Mr. Wm. B. Ittner of St. Louis, Mo., and Mr. C. B. J. Snyder of New York, discussed the former; the latter was presented by Mr. S. A. Challman, State Commissioner of School Buildings for Minnesota. The discussions were participated in by many members, among them the chiefs of fire departments and well-known manufacturers.

Mr. Ittner opened his address with the remark that the large number of fires and fatalities in school buildings is evidence that great damage to these buildings, or their complete destruction, had been provided for in their designing by masters of combustible construction. He sketched the progress of recent years in connection with which he pointed out that the results obtained are more in the direction of means of escape than in fundamentals of safe construction. He showed that fire escapes on school buildings are not an adequate means of exit, but urged that safe stairways be installed in every instance. He contended that even non-fireproof buildings can be made safe by the isolation of rooms and by the provision of individual exits.

To eliminate exposure to fire danger, Mr. Ittner urged an adequate site and a low structure. To obviate the objection of large areas, he advocated the use of masonry walls as fire stops, with fire doors at openings.

Stairways, according to Mr. Ittner, should be ample in number and with minimum horizontal length in travel from all rooms, with adequate exits at the street or ground level. Width of stairways, he said, should not be more than five feet, with handrail on both the wall and the balustrade, and two runs to each floor.

Mr. Snyder, speaking on fire drills, emphasized the point that in non-fireproof buildings the fire drill should be directed toward emptying the building in not more than three minutes, and in

fireproof buildings in not more than three and one-half minutes. The reason for the slight difference between the maximum times for the two classes of buildings is to make sure that everyone is out of the building by the time the fire department arrives. It is not advisable, according to Mr. Snyder, that anyone should fight the fire, and it is not necessary for anyone to know where the fire is located.

Strictly fireproof construction for all schools be urged on the ground of greater safety, more adequate sanitation, lighting and ventilation, and because of the constantly decreasing cost thru the improvement and cheapening of materials and methods.

The question of protection for manual training, domestic science and chemical rooms, with their recognized special hazards, was discussed by Mr. Snyder. He urged that they be taken care of in the same manner that these hazards are safeguarded in buildings devoted to industrial or commercial uses, including installation of sprinklers. Mr. Snyder concurred in the suggestion that sprinkler equipment be added. He objected to the use of tanks, either gravity or pressure, and urged that single source equipment be provided.

Mr. H. W. Forster of Philadelphia, advocating the construction of one-story schools, cited the example of Rochester, N. Y., where notwithstanding the necessity of purchasing additional ground for sites, it has been found that one-story school buildings cost \$3,000 per classroom, instead of \$4,000 in buildings of the three and four-story and basement type. He contended that exposure is not a serious factor with safely constructed schools.

Mr. Forster advocated sprinklers on all floors of buildings up to the last or attic floor. The reason for not installing sprinklers in the top floor is that "90 per cent of all school fires start in the basement."

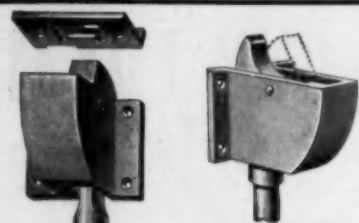
Gorham Dana of Boston, quoted the provisions of the Massachusetts bill now pending which cuts off basements of schools from the first floors, and provides for the protection of basements with sprinklers. Mr. Snyder gave some interesting figures regarding school fires in New York City during the last six years. He showed that 39 fires were of incendiary origin, twelve were

from adjoining buildings, ten were due to carelessness of workmen, 26 started in wardrobes and closets, six were due to boilers or stoves, and 42 were traced to lighting or gas, making a total of 155 and a resulting loss of \$26,000. Mr. Snyder contended that sprinklers should be installed not only to save life, but also to protect school property against destruction.

Richard L. Humphrey of Philadelphia, advocated the use of ramps in place of stairways, to which Mr. Snyder took exception. The latter showed that the ramp is not feasible because of its requirements for floor space. Another objection to it was the fact that children will run down and pile up at the bottom. Mr. Snyder advocated adequate and safe stairway facilities and urged that doors to classrooms be hung to open inwardly so as to keep the corridors clear. He contended that if classroom doors open inwardly, a 90-pound teacher will be able to control a room of boys ranging from 12 to 15 years. A further recommendation of Mr. Snyder was that automatic signalling systems be installed, with no boxes, in classrooms. The latter should be in the corridors, basements, etc., and should be of the break-glass type. He is of the opinion that fires do not develop in the classrooms, and that it is not necessary for either the teacher or the pupils to know where the fire is located. The main purpose is to get the pupils out of the structure.

Mr. Challman, in his paper, discussed the plan of building, the materials of construction, janitor service and equipment for the proper maintenance of school structures. He commended the provision and use of several small rooms for storage and waste for the janitor, rather than one large one. He declared the use of fireproof material makes for cleanliness and sanitation, as well as offering safety against fire.

Chief Frank H. Henderson of the St. Louis fire department urged that in old school buildings, stairways and stair wells be sprinklered, or enclosed so as to make them smokeproof. The question of charges for water service brought out the fact that the Chicago water department makes no charges for water used for fire protection. The purpose is to encourage the installation of sprinkler equipment in buildings.



Side View of Top Case showing Auxiliary Latch.

Fire! Fire!! Fire!!!

EVERY disaster in school, theatre or factory emphasizes the necessity of providing for quick exit from buildings where people gather, in case of panic caused by fire or in other ways. At the first alarm every one rushes to the exit doors, to get away from the danger inside, into the safety of outdoors. If the doors cannot be opened, the people are trapped and disastrous results follow. There are thousands of schools which have doors that

could not be opened quickly—perhaps not at all—in case of fire or panic. All exit doors in such places should be equipped with the

SARGENT

REG. U. S. PAT. OFF.

Gravity Locking Fire Exit Bolt



door. It can be quickly reversed for either right or left hand doors and is easily applied. We furnish this Bolt for doors 8 feet high and 3 feet wide but it can be cut down by the carpenter to suit smaller doors. Each Bolt is packed, complete with its rod, in a separate box.

This Bolt can be supplied in Iron, Brass and Bronze by representative hardware dealers in all cities.

which is illustrated herewith. This Bolt is effective, simple and low in cost; it affords certain protection against entry from outside and operates instantly from the inside in case of necessity, opening the doors to their full width by pressure against the bar which extends across each

Sargent & Company

Manufacturers of Fire Exit Door
Bolts, Locks and Hardware

New Haven, Conn.

New York

Boston

Chicago

Mr. Snyder emphasized the need for disposition of waste material in schools. He advocated the construction of fireproof vaults in the basements, with fireproof chutes from the various floors. A receiving room, equipped with sprinklers is recommended, as also a sprinkler head above each chute. A crematory should be established alongside the waste room.

Mr. Henley of St. Louis urged the elimination of the basement, except as space for the furnace room and storage room for the janitor, because it has proven the origin of a large proportion of the school fires.

Mr. Williams of Wisconsin, criticized the tendency to hold fire drills in accordance with a prescribed system. He urged that drills be developed in accordance with the exigencies of an emergency. Mr. Snyder gave as his opinion, that if a building is properly planned, with proper exits, there should be no miscarriage of a fire drill.

Captain Conway of Cincinnati, took strong ground against dependence on an automatic device, which shows where a fire is, or which seeks to put out a fire in schools. He contended that it is not necessary to know there is a fire, but there should be an effort to get the children out. He urged that the stairways be just wide enough for two abreast and that there should be absolute order in passing out. Waste paper should be consigned to a fireproof room in the basement. There should be an adequately protected furnace with a flue carried well above the roof.

Prof. Challman discussed the question of the supervision of fire drills. He declared that no one is so safe a leader for children in fire drills as the teacher. In his experience, he has found that disobedience of the teacher's directions is promptly resented by the other pupils.

MISCELLANEOUS NEW SCHOOL LAWS.

The Massachusetts legislature has passed a law providing for refunds to members of the teachers' retirement association who withdraw from the service of the public schools. If such a teacher withdraws before six annual assessments have been paid, the total amount to which such teacher is entitled may be paid to him in one sum; after six assessments have been paid, the amount so refunded will be in the form of annu-

ity for life based on the contributions of such teacher, together with interest, or in the form of four annual installments.

A new law in Massachusetts requires that the city or town school board shall obtain the name, age and residence of every child between 5 and 7, between 7 and 14, and between 14 and 16 years, and of minors over 16 years of age who cannot read and write. Card records must be kept in the school office so that the attendance officers may keep in touch with the children who attend and those who are absent. Supervisory officers of private schools must, within thirty days, report the enrollment of children of compulsory age. When such child withdraws, the school must report the same within ten days.

The state of Virginia has passed a law providing for the appointment of a special joint committee on publications. The committee is to consider and report on the advisability of printing and publishing a portion of the textbooks used in the public schools of the state.

An amendment which has been added to Chapter 252 of the Virginia acts of 1906, authorizes the several school boards of the school districts of the state to borrow money belonging to the literary fund. School boards may borrow such fund for enlarging schoolhouses, the amount of the loan not to exceed two-thirds of the value of the school property on which the money is borrowed. On loans not exceeding \$3,000, the interest is at 3 per cent; exceeding \$3,000, the interest is 4 per cent.

Section 1437 of the Virginia code, relating to the appointment of a division superintendent of schools, has been amended. The amendment provides that in case of failure to elect a superintendent before April first of any year, the incumbent may hold the office for the succeeding four years; if the board is then unable to elect, it may attach the division to an adjacent division. The applicant to be elected, must hold a teacher's license equivalent to first grade, or hold the office of division superintendent, and must have taught the number of years required by the rules of the board.

A law has been passed in the Virginia legislature making it unlawful to use a common or roller towel in any hotel, railway train, railway

station, public or private school, public lavatory or washroom.

An act of the Virginia legislature authorizes the board of supervisors of any county to appropriate out of the general funds of the county, a sum not to exceed 25 per cent of the amount collected during the preceding year, for the support of the public schools.

The District Court of Appeals of Washington, D. C., has affirmed a ruling of the lower courts that a rule automatically removing from office school teachers who marry is inconsistent with the school law. In effect, the decision compels the reinstatement of a teacher who brought suit against the board for removal from her position.

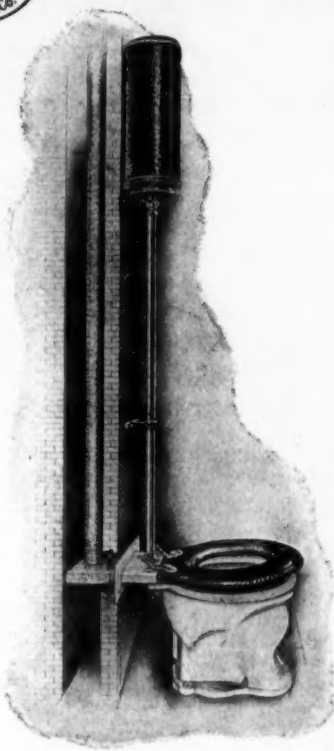
According to an opinion given by the assistant attorney general of Maine, the joint committee and no other body may fix the salary of the union superintendent of schools. When the salary has been fixed by the committee there is no doubt that the salary of the superintendent of schools must be paid.

Attorney General Pattangall of Maine has ruled that under the existing law, a city is required to carry forward the unexpended balance of its school funds on the common school account on the basis of the total balance unexpended at the close of the fiscal year. Because the state law did not become effective until July, 1915, does not in any way affect the question. The opinion was given to the city of Lewiston.

The attorney for the board of education at Rockford, Ill., has ruled that there is no bar to the appointment of married women as teachers in the schools. In the past the board has been under the impression that such a rule did exist and has refused the applications of married women.

The County Circuit Court of Mercer County, Ill., has upheld the constitutionality of the 1915 high school tuition law. The decision, in effect, releases a large share of the state distributive fund which has been upheld in the county.

The attorney general of Texas has ruled that county school trustees have power to create new common school districts. In such cases, however, the county commissioner's court has the authority to appoint the local trustees for the new district to serve until the next election.



How About the Sanitary Conditions in YOUR School?

Are your toilet rooms modern in every respect? Are they neat and clean? Are the fixtures such that they will insure sanitary conditions? You are undoubtedly planning to have some repairs made during the summer and it will pay you to investigate our fixtures.

Nelson Pressure Tank Closets

are ideal for schools because there is a certain completeness and finish about each fixture that challenges criticism. The accompanying illustration shows one of our many styles of Pressure Tank Closets which we manufacture.

Complete information may be secured by writing today.

Our experts are at your service.

Branches
and Selling
Agencies

Los Angeles, Cal
Pueblo, Colo.
Salt Lake City, Utah
Memphis, Tenn.
Houston, Texas

N. O. Nelson Mfg. Co. Edwardsville, Ill.
St. Louis, Mo.



PRESENTING THE SCHOOL BUDGET.

To the average school board member the annual school budget is a task which he dreads more than any other phase of his work. Generally he does not thoroly understand it and fears that its publication may cause public criticism of the annual school expenditures or may entail a fight on the policies of the school board. The difficulty has been that school board members have not approached the budget in a scientific spirit and have not taken the public into their confidence. They have not insisted that their secretaries and accountants make a study of actual needs as shown by clear-cut, fact-governed estimates, supplemented and checked by cost records of past years. They have not had adequate surveys of buildings and repair needs for a period of years in advance and have not delved into well considered estimates of the growth of population and of the extension of school service. Again, many have unconsciously absorbed, from unwise supervisors and superintendents, a spirit of getting as much money as the taxpayers will allow without strong public protest. Too many school budgets are made by the rule of thumb and lack that accuracy and plainness which will make public justification easy.

Quite a contrast to the condition of affairs found in the average city is the policy of wise finance and publicity in force in Erie, Pennsylvania. The business affairs of the Erie School Board are administered with as much foresight and attention to good principles of school administration as are the educational affairs. Finance, purchasing, accounting methods are the result of careful study, and the business manager is as much an expert in his work as the superintendent is in his field.

An illustration of the progressive attitude of the Erie board is to be found in the recent publication of its budget for 1917, in the form of a bulletin distributed to the public. A complete explanation of the budget and of the rea-

OUTLINE OF THE BUDGET OF THE ERIE, PA., SCHOOLS.

(Follow on pages 58, 60 and 61.)

Estimated Expenditures.

10—General Administration.

Business Control—

Board of School Directors and Business Offices (salaries and incidentals)...	\$ 8,460.00
Finance Offices and Accounts (including tax collectors and auditors).....	11,365.00
General Legal Service.....	500.00
Operation of Office Building.....	1,670.00
Maintenance of Office Building.....	200.00
Outlays Office Building	50.00
Contingencies	1,000.00

\$ 23,245.00

Building Department—

Salaries	\$ 1,860.00
Operation (warehouse)	280.00
Maintenance (warehouse)	125.00
Contingencies	50.00

\$ 2,315.00

Total Business Control.....

\$ 25,560.00

Professional Control—

Superintendent of Schools' Office—Salaries.....	\$ 4,690.00
Auto, Telephones, Contingencies.....	800.00

\$ 5,490.00

Enforcement of Compulsory Education—

Salaries	\$ 2,265.00
Operation	316.00
Contingencies	240.00

\$ 2,821.00

General Promotion of Health—

Salaries	\$ 750.00
Contingencies	200.00

\$ 950.00

Total Professional Control.....

\$ 9,261.00

Total General Administration.....

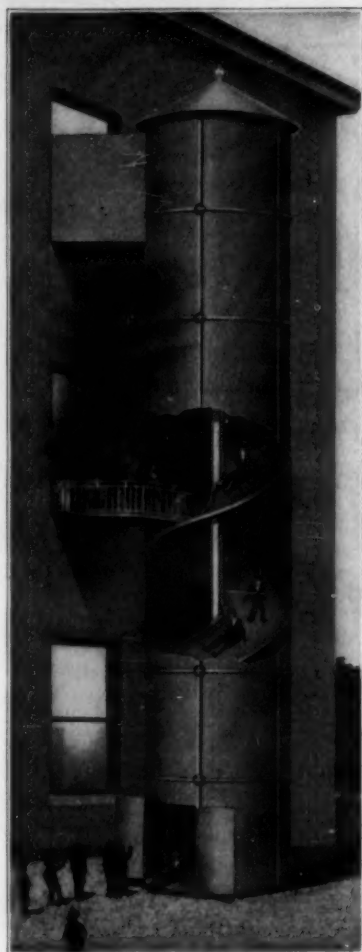
\$ 34,821.00

20—Instruction.

Expenses of Instruction—

Teachers' Salaries—High School.....	\$ 69,689.70
Teachers' Salaries—Grades	\$205,601.90
Grades, Special	11,020.00
Teachers' Salaries—Institutes	5,000.00

216,621.90



By equipping your schools with the *right* kind of fire protection devices you

AVERT DISASTER

Architects and school boards unanimously commend our

SPIRAL FIRE ESCAPES

Constructed in either open or enclosed type—*absolutely smooth run-way*—no projections to catch clothing or prevent continuous slide to safety.

If your school is not already equipped with this modern protective device *don't delay any longer*. Write today for full particulars.

Minnesota Manufacturers' Association

NORTH ST. PAUL, MINNESOTA

Branch Office, 212 Machinery Hall, 549 W. Washington St., Chicago, Ill.

PUBLIC SCHOOL CLEANLINESS

Unless the School Building is kept in an absolutely sanitary condition, it not only renders educational work superficial, but endangers the health of the community.

The House of Robertson has specialized for years on **School Cleanliness and Disinfection.**

Twenco for Schools

Twenco is the most highly developed type of Disinfectant and Germicide.

It is 20 times as powerful as pure Carbolic Acid. It should be used wherever germs may be harbored, and its extremely high dilution makes its cost very low.

Kotar for Schools ("Bactericide")

Used for Mopping and Scrubbing Floors and flushing the Toilet. It reaches and removes the dirt, germs and vermin. Supplied in Carbolic Coefficients of 10, 5, 3 and 2.



Original 20th Century Soap for Schools

This is the best all-round Cleanser for Schools, used for Cleaning Floors, Woodwork, Furniture and other Finished Surfaces. Splendid for Slate Blackboards.

We are headquarters for all School Supplies, including Liquid Soaps, Paper Towels, Toilet Paper, Mops, Brushes, Paper Towel and Toilet Paper Fixtures. Get our prices.

Theo. B. Robertson Products Co., Inc.

CHEMICAL DEPARTMENT

700-704 West Division St., Chicago, Ill.

Western Office: M. M. Clark, Manager, 203 S. Craig Ave., Pasadena, Cal.
St. Louis, Office: Navarre Bldg., 6th and Chestnut Sts.

sons for the growing increase in the cost of the schools are presented. The outline is of interest as a method of conducting public business, and gaining approval by absolute frankness. School boards quite generally might profit from a similar method.

The Erie Board of Education conducts its business on what is popularly termed by school accountants as the budget system. Each year, in March, teachers, janitors, engineers, principals, supervisors and other employes of the schools are invited on special blanks, to prepare an itemized statement of the probable needs of their departments and activities. Everything that represents expense is anticipated and is reported by the board of education. The hundreds of sheets containing thousands of items are carefully examined and reduced to a cash basis, that is, the estimates of needs are restated in the form of the possible cost of each item required. The items are distributed under the proper accounting heads and devices, and the assembled figures are summarized and placed before the school board for evaluation.

The estimates are then examined in detail by the committee on finance and property, with the assistance of the superintendent of schools, the business manager of the school board, and the respective heads of departments. Items which are unnecessary are reduced or removed entirely from the list so that the final budget as it is handed to the board of education, represents a careful estimate of the actual cost of conducting the schools, with such necessary additions and improvements in the school service, as may be needed. Altogether the committee, during the present spring, eliminated items amounting to more than \$114,000.

In explaining to the public its policy in fixing the budget, the committee on property said, in part:

"The annual analysis of the needs of the schools, always a work of some magnitude, took

Free Books—High School, Regular.....	3,684.80
Grades, Regular	6,700.75
Night Schools, Regular and Supplementary.....	300.00
Free Books—Supplementary, Reference and Desk.....	3,070.92
Supplies—General, Class AA—	
High School	\$ 584.38
Grades	1,887.91
Playgrounds	80.00
	2,552.29
Supplies—General, Regular	9,673.97
Supplies—Special, High School Science.....	915.00
High School Drawing.....	25.00
High School	689.43
Normal	50.00
Manual Training and Domestic Science.....	2,832.74
Grades	2,070.01
Night Schools	250.00
Printing—General	1,500.00
Contingencies	5,000.00
Total Instruction	\$330,626.51
Expenses of Operation—	30—Operation of School Plant.
Engineers' and Janitors' Salaries.....	\$ 29,370.00
Janitors' Supplies, Tools and Equipment.....	1,723.06
Fuel, Light and Power.....	17,500.00
Telephones	503.00
Laundry Service	156.10
Light Supplies	413.13
Drayage	1,605.00
Contingencies	3,200.00
Total Operation	\$ 54,488.29
Expenses of Maintenance—	40—Maintenance of School Plant.
Furniture, Fixtures and Equipment (Replacements).....	\$ 2,011.75
Repairs to Buildings.....	5,680.82
Repairs to Heating Apparatus.....	1,910.00
Repairs to Furniture, Fixtures and Equipment.....	2,000.00
Upkeep of Grounds.....	1,235.50
Insurance	515.32
Contingencies	4,140.00
Total Maintenance	\$ 17,493.39
Expenses of Auxiliary Agencies—	50—Auxiliary Agencies.
Athletic Field—	
Operation, Salaries	\$ 75.00
Maintenance, Furniture, Fixtures and Equipment (Replacements)	25.00
Outlay	147.56
Total	\$ 247.56

(Continued on Page 60)



When this school was built these people wanted the best toilet room fixtures they could get. Do you wonder they selected "EBCO?" Do you want the BEST?



C-242 FOUNTAIN

*"Ventilation
Insures
Sanitation"*



B-61 CLOSET COMBINATION

The D. A. Ebinger Sanitary Mfg. Co.

MINNEAPOLIS, MINN.
1st Nat. Soo Line Bldg.

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NEW YORK CITY
101 Park Ave.

Announcement

The Schoolhouse Commission of Boston, Mass., Has Adopted as Their Standard

"Sanitary Oil Painted No. 10 Jute Cloth" Wainscoting for their schools.

They specify and use it on the wainscots of all corridors, vestibules, stair halls, assembly halls, class rooms, etc., running it from base board to a picture moulding placed parallel to tops of doors and windows.

This adoption was only arrived at after a most exhaustive examination by the Commissioners and Architects as to the sanitary, economical, protective, artistic and washable features of "No. 10."

Hundreds of other cities and towns have also adopted it.

Write for full particulars.

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SOMERVILLE, N. J.

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For School Busses
School Cars and
School Wagons

ARE—Standard Equipment
—A necessity
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—Easy to operate
—Free from fumes and smoke
—Hot Air Furnaces
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—Fully guaranteed

WE SATISFY OUR CUSTOMERS

Write for Prices

Address Dept. A.

MILLER VEHICLE HEATER COMPANY
CRAWFORDSVILLE, IND.

(Continued from Page 58)

on this year an importance and a seriousness not heretofore presented in any determining of the financial affairs of the school district. In its deliberations your committee took into particular consideration three things:

"1st. The obligations that have been handed down to this board thru past years.

"2nd. The obligations that are pressing upon us in the form of the growing requirements of the schools.

"3rd. The demands which the future will inevitably make upon whatever boards may be in charge of educational affairs.

"We tried to meet the problem in the same spirit that any board of directors of any large corporation would meet its business problem and with the added realization that in conducting schools it is not profit as it is shown on the ledger that is of the greatest consequence, but rather the well-being, present and future, of the boys and girls who are intrusted by the people into the hands of the school authorities.

In explaining the necessity of increasing the tax rate by one mill, the committee declared that it was primarily keeping faith with the children in relation to their rights in the schools, without overlooking in any degree the rights of the taxpayers. The committee said:

"There are 880 more children enrolled in the schools today than there were one year ago. This is a measure of Erie's growth. Every instrument of public influence and civic activity has been used to encourage people to move to Erie. Our industrial plants are prosperous. Their success is an inducement to people to come from other communities to become parts of the local community. These are now taxpayers and citizens. Their children must be cared for in the schools. If any of these are people of foreign traditions and tendencies, it becomes the duty of the school to assimilate their children and mould them into American citizenship. This

Promotion of Health—

Salaries	\$ 3,875.48
Supplies	847.10
Maintenance—Furniture, Fixtures (Replacements).....	56.00
Outlay	34.00
Contingencies	1,025.00
Total	\$ 5,837.58

Public Library—

Administration	\$ 1,620.00
Personal Service	7,392.50
Books, Supplies, Exhibits.....	7,550.00
Operation of Plant.....	3,177.00
Maintenance of Plant.....	906.10
Outlay	782.00
Contingencies	400.00
Total	\$ 21,827.60

Branches—Personal Service

Operation, Salaries	\$ 880.00
Maintenance	540.00
Outlay	45.00
Total	\$ 1,625.00

Total Auxiliary Agencies..... \$ 29,537.74

60—Miscellaneous Expenses.

Retirement Fund—Payments and Contingencies.....	\$ 6,500.00
Workmen's Compensation Fund.....	300.00
School Gardens	300.00
Rented Houses	540.00
General Contingencies	6,000.00

Total Miscellaneous Expenses..... \$ 13,640.00

70—Outlays.

Capital Acquisitions and Construction—

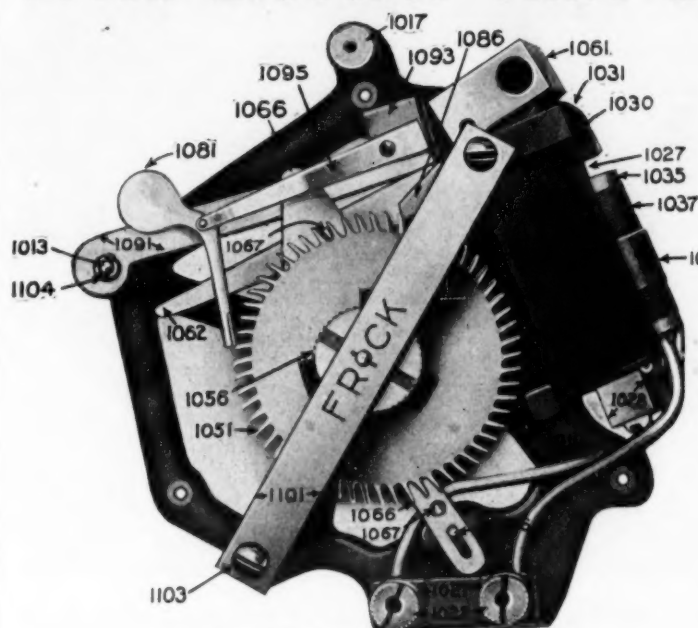
Sites—Proposed	\$ 30,200.00
Secured	90,331.74
New Buildings—Academy High School.....	350,000.00
East High School.....	50,000.00
Lincoln Building	50,000.00
Portables	3,300.00
Permanent Improvements—Buildings.....	1,703.60
Grounds	4,787.10
Furniture and Fixtures (new), Class A.....	1,163.50
Furniture and Fixtures (new), General.....	9,775.50
Heating and Ventilating Apparatus (new).....	2,597.50

Total Outlays

\$593,858.94

Frick Electric Time and Program Clock Systems

The Secondary Clock Movement that CHALLENGES ALL COMPETITION



FRICK Secondary Clock Movement

Its Points of Merit

1. GRAVITY DRIVE, which is a constant driving force. NO SPRINGS IN THE ENTIRE CLOCK, therefore no variation in driving power. No springs to SET or BREAK.
2. Positive drive for hands. Clock can jump only one minute at each impulse from Master Regulator. A special patented verge construction positively prevents racing. Movement is locked before, during and after impulse. THE ONLY SECONDARY CLOCK MOVEMENT THAT IS POSITIVELY LOCKED DURING THE FORWARD MOVEMENT OF HANDS.
3. Knife edge pivot for armature, minimum friction.
4. Cam construction which makes magnet 100% efficient.
5. No adjustments. Once right, always right. Its efficiency not dependent upon the accuracy of some adjustment which is variable.
6. Special Automatic Cut-out switch making it possible to remove any secondary clock movement with dial from case without tools or without interfering with any other clock on circuit.
7. Hands are set by knurled nut on movement. No danger of locked hands, due to bending in setting clock.
8. Each clock consumes but 1-10 watt second per minute.

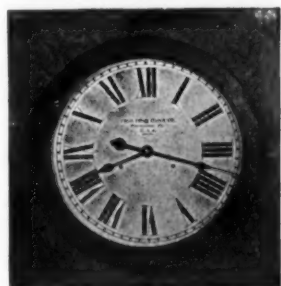
Compare the points of merit with those of our competitors.

LET US SHOW YOU, that the Frick Electric Time and Program Clock System is the best made. The four cardinal points of the compass which pilot our progress are:

SIMPLICITY, ACCURACY, SERVICE AND ECONOMY. Thousands of installations throughout the civilized world testify as to the merits of our goods.

Write for complete catalog. Yours for the asking.

N. B. We will gladly assist Architects, Engineers and School Authorities in the preparation of specifications, conduit lay-outs, etc. Send us your plans and let us prepare specification and conduit lay-out.



Style 1S



Style 2

Landis Engineering & Mfg. Co.
WAYNESBORO, PA., U. S. A.

involves an expense that considered in relation to results will undoubtedly be cheerfully borne.

"The schools of Erie must be kept on a par with the schools of progressive communities everywhere. The child who attends a school in Erie should have assured to it the same chance for preparation for life that is afforded the child attending the school system of any other city. In the stress of later life, the products of the school system of Erie will be in competition with the products of other school systems. School expenses cannot be considered alone with thought to what schools have cost in the past. It must be considered in relationship to new conditions of living that changing economic and social situations have combined to create.

"The law of the state and the demands of the people fix a standard for the schools and for the board. Every biennial session of the state legislature enacts new school laws entailing further expense upon the people. The school board has no choice; it must obey. The people, thru civic organizations and community associations, petition for new branches and new departments. No committee or body of citizens has ever appeared before this board to urge a curtailment of the activities of the schools. Numerous delegations have attended the board sessions and a great number of petitions have been presented, however, urging a broadening of the scope of the school work. The board has tried to respond intelligently and sympathetically; it has tried to be progressive and yet not progress too fast. It is endeavoring to develop a school system that will meet modern demands and conditions of life. It costs money to do it.

"The present year is one of marked prosperity. Work is abundant, wages are high, money is being freely spent. Consideration of all these facts will probably convince the thoughtful taxpayer that the diverting of a modest portion of the money of the people into channels of educa-

80—Debt and Debt Service.

Redemption of Bonds.....	\$ 17,500.00
Payment of Interest and State Tax on Bonds.....	64,742.50
Payment of Mortgages	7,000.00
Payment of Interest on Mortgages.....	660.00
Contingencies	175.00

Total Debt and Debt Service..... \$ 90,077.60

Grand Total Estimated Expenditures..... \$1,164,543.37

Estimated Receipts.

Revenue	596,343.37
Non-Revenue	\$ 568,200.00
Total Estimated Receipts.....	\$1,164,543.37

tion is a wise investment, that means abundant returns in the future.

"The additional money required by the natural growth of the schools, the expressed demands of the people locally and the laws of the state is much in advance of the proceeds of taxation on the increase in the city assessment upon which school taxes are levied.

"In its deliberations your committee first endeavored to hold the levy down to its present rate. It could not do this and at the same time retain the features now in the course of study, maintain the school plant in a safe, hygienic and comfortable condition and in proper repair, and meet its debt and interest. An increase of one mill in the levy is therefore recommended."

The practical working out of the details of the budget was in the hands of Mr. Wm. J. Flynn, secretary and business manager of the schools. The form of the budget is a model which school authorities may adopt generally. Mr. Flynn has been one of the leaders in the movement for uniform school accounting and the outline as prepared by him, follows closely the uniform distribution of school accounts as adopted by the National Association of School Accounting Officers.

THE SERVICES OF AN ARCHITECT.

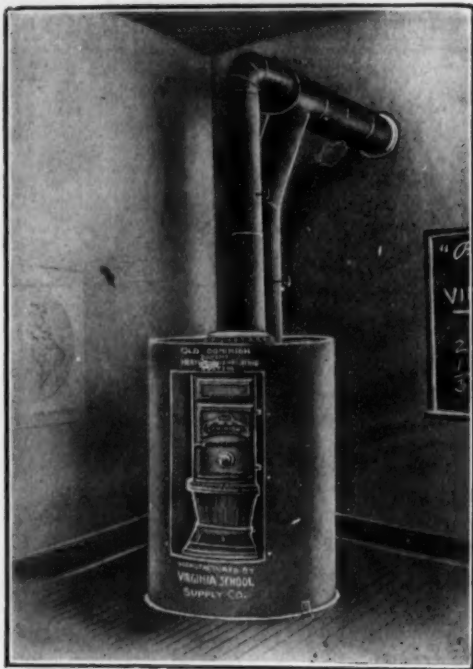
(Continued from Page 31)

When the location is in contemplation, or has been determined upon, the architect selected should be made acquainted with the owner's ideas and conception of what the building should be, and its character and purposes. The exigencies of the site should then be studied, and the climate, outlook, grades, drainage and other essential factors carefully considered, as their influences make for the success or non-success of the completed building.

This will enable the architect to obtain a knowledge of the essential requirements, to discuss any fallacies, and to sketch out practical and comprehensive plans for the interior arrangement and exterior design, organized and adapted to the real need and precise conditions, in conjunction with the economic conditions that underlie the problem. These preliminary studies may offer several solutions, each advantageous from one point or another, which may be intelligently discussed with the client and lead to definite conclusions.

From these sketches and studies showing the general plan and design of the building contemplated, with their accompanying synopsis of the materials of construction, fixtures and finish,

Heating and Ventilation are Two Important Factors in the Schoolroom



Where the heat is not uniform, or the proper ventilation insured it is impossible to have a bright, cheery class of children.

If the air in the schoolroom is foul, and ventilation poor, disease is almost inevitable.

It is up to you to protect the health of the children. Install in your school an

Old Dominion Patent Heating and Ventilating System

With our system installed you keep the room fresh with pure air, yet warm and

comfortable. No separate independent foul air ducts or flues made of brick or metal are required, as is the case with many other heating and ventilating systems.

It is easy to set up, and regulate, and will not clog with soot or rot out. Every part is combined, and a stove pipe of five feet is furnished.

Our heating and ventilating system is guaranteed to give the best of service. Write today for our descriptive catalog.

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The INTERNATIONAL System



A WELL WARMED, WELL VENTILATED SCHOOL ROOM USING

THE INTERNATIONAL SCHOOL HEATER

Designed for Warming and Ventilating One Room and Portable School Buildings

See it at the N. E. A. Convention, New York City, July 3-7, Madison Square Garden

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NEW YORK
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CHICAGO
1933-35 Wentworth Ave.

close approximate estimates may be obtained from contractors. These estimates afford a basis for determining the future possibilities of the project and enable its further development by the preparation of the final working drawings, which involve an accurate layout of all the floors, all the elevations, both exterior and interior, also typical sections and details of the methods of construction. The working drawings must be so complete that a contractor will know exactly how and of what material every part of the building is to be constructed, thereby forestalling any guessing, which so frequently is costly to the owner.

The working drawings are accompanied by specifications, taking up in the form of a description what it is impossible to express on the drawings, and stating therein with clearness and precision the grades and character of the work, materials, ingredients, appliances and fixtures required to be used and installed. These specifications also show how the contractor shall do certain portions of the work and co-operate with the various sub-contractors; they also state the indemnity bonds, insurance, etc., required; and, in general, form a complete thesis of the building to be constructed, leaving no doubt in the mind of the contractor as to the exact amount and character of the work called for. This assures that all estimates received shall have been intelligently submitted, and that, when the contract is ultimately awarded the contractor can plan its progress with a definite knowledge of the materials and requirements, the work being thus carried out with greater expedition and consequent economy.

When it is decided to begin work, a legal, binding and definite contract must be prepared by the architect, in which the requirements on both sides are clearly set forth; the "instruments of service," in the form of specific and technically intelligible drawings and specifications, being made a cohesive part of this contract.

Definite terms of payment, time of completion, and requirements in connection with lien laws must be provided for. There must also be provisions in the contract for fire, lightning, casualty, compensation and contingency insurance, also for necessary bonds in connection with completion, and for compliance with local, municipal or state requirements, departmental directions or rulings, ordinances and acts.

After the contract has been awarded, the architect should be placed in full charge so as to enable him to direct and observe the proper laying out of the work and to see that plans and specifications are conformed to. He must also make proper disposal of the problems that arise while the building is in progress, passing on all technical questions and furnishing from time to time explanatory detail drawings of the various parts of construction, ornamentation, fixtures, arrangements, etc., as required. He issues certificates of payment as they fall due under the terms of the contract and also becomes the arbiter in all questions of dispute.

It is only by following these steps, in their logical, natural sequence from the very conception of the building to its completion, that an owner can obtain the best results with a minimum of worry and a maximum of economy.

In order to construct a building successfully, it is necessary to anticipate each step in the progress of its development and to outline a complete system for its erection and to control the work until the building is turned over completed to the owner.

Full architectural services, rendered by a competent man, will save many times his comparatively small compensation. The instruments of service, the plans and specifications, are the fundamental elements in the contract, and to produce them requires thought, experience and learning, also familiarity with the qualities, properties, peculiarities, weight and strength of materials, the weights of the struc-

ture and the relationship of the various operations to be performed by the many trades in the building.—*California Architect and Engineer.*

Busy Superintendents.

The school board at San Jose, Cal., has exonerated Supt. Alexander Sherriffs of the charge of neglect of duty preferred by the mayor of the city, R. F. Husted. The San Jose charter adopted in 1879, requires the superintendent to visit each schoolroom monthly, and the mayor used this provision as a basis for asking the ouster of the superintendent. The school board unanimously found that while the charge was technically sustained by the facts, that present conditions make monthly visits impossible without the neglect of other important work of administration.

Recently the presidents of the 23 roll rooms of the Eugene High School visited the businessmen of Eugene and asked for words commonly misspelled by their employees or correspondents. Forty-three men responded with a total number of 1,000 words. Of this number, one hundred were mentioned more than once, and the list, which was found to be composed of common words, has been given to every student in the high school. They were given the first time before the students had studied them and then were given a second time. In this way practically everyone spelled all the words perfectly the second time.

A school cafeteria was organized last September on a small scale and later special rooms and extra equipment were secured and a class in serving organized. The prepared food from the cooking classes was turned over to the lunch department and no fees were charged the girls in the laboratory classes. The cafeteria class prepared the rest of the food and took charge of the serving lines under the management of two girls who were appointed to act as supervisors for one week. All meats, vegetables, desserts and chocolate and milk were served for three cents.

Students deficient in spelling and composition work will be compelled to enroll in special classes next year until such time as they can remove conditions in the English work and reach a certain standard of efficiency in all written work.



STANDARD GRADED WORK



STANDARD GRADED WORK

These illustrations indicate some varied conveniences of the Moulthrop Movable Chair Desk.

Its manifold utility can only be appreciated by actual use.

We are prepared to prove—

That almost every School can use some Moulthrops to advantage.

That many Schools can use Moulthrops exclusively to advantage.



SPECIAL SCHOOL WORK



OPEN AIR WORK

If you will fill out attached coupon we will send you one Moulthrop Movable Chair Desk complete without obligation on your part except that you use it or have it used, and you can convince yourself that the above is true without experimenting with a whole school or even one room, but with only one pupil, or by using the Moulthrop Desk yourself. Either return it to us when so instructed [at our expense] or pay us the regular price therefor, which is \$5.75 for size and style sent.

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AMERICAN SEATING COMPANY
1030 Lytton Building
Chicago, Ill.

Please send me a Moulthrop Movable Chair Desk in accordance with your offer.

Consign to _____

City _____ State _____

My position is _____

Name of School District, etc. _____



Sani-Steel Movable Chair Desks

A class in Teachers College, Indianapolis. This change of position may be made in less than two minutes.

Send for illustrated circular and list of schools wherein these chair desks have been installed.

Columbia School Supply Company
Indianapolis, Indiana

SILENT GIANT

Insured for a lifetime
against all
Defects and Breakages



Get the Desk that will give you
STRENGTH, SERVICE AND SANITATION

ALL ORDERS FILLED PROMPTLY
CATALOGUE SENT ON REQUEST

PETER & VOLZ CO.

MANUFACTURERS

School Furniture, Assembly Chairs and School Supplies

Office and Factory: ARLINGTON HEIGHTS, ILL.

Among Boards of Education

BUSINESSMEN ENDORSE FEDERAL AID FOR TRADE SCHOOLS.

That a majority of the business interests of the country are in favor of federal aid for vocational education is indicated by the results of a referendum vote of 350 commercial organizations, chambers of commerce and boards of trade in 42 states, Alaska, Hawaii, District of Columbia and Paris, France, resulted in the endorsement of the four recommendations.

The referendum was undertaken by the Chamber of Commerce of the United States at the instance of a special committee which included: Mr. Frederick A. Geler, chairman; Mr. A. B. C. Dohrmann, San Francisco, Cal.; Mr. Maurice Fels, Philadelphia, Pa.; Mr. A. L. Filene, Boston, Mass.; Dr. Charles McCarthy, Madison, Wis.; Dr. C. A. Prosser, Minneapolis, Minn.; Mr. G. L. Swiggott, Washington, D. C.; Mr. Frank V. Thompson, Boston, Mass.

The first recommendation of the committee, providing for federal appropriations for the promotion of vocational education in the United States, received 831 favorable votes. It was urged that a relation be established between federal and state appropriations, and that provisions be made for federal administration of the part which the government is to assume.

The second recommendation, which provided for federal appropriations allotted among the states upon a uniform basis, and bearing a uniform relation to appropriations made by the states for like purposes, was carried by a large majority.

The third recommendation urged the creation of a federal board to administer the national functions in vocational education, this board to be given compensation sufficient to command in its

membership ability appropriate to the task to be performed. It was carried by a vote of 788.

The fourth recommendation, which was supported by 784 votes, urged that the federal board, however constituted, be required to appoint advisory committees of five members each, representing industry, commerce, labor, agriculture, home-making and general or vocational education. It was further provided that these advisory committees be appointed for only such periods of service as the federal board may determine; that the members receive reimbursement for traveling expenses and compensation for time actually spent in the active discharge of their duties; and that the personnel of the committees represent as many different parts of the country as the geographical distribution of the industry will permit. It is recommended that the aggregate amount to be spent in any one year be limited to approximately \$50,000.

It is the opinion of the special committee that, without government co-operation and the impetus from federal appropriations, the states can develop vocational education very slowly. The industrial welfare of the country demands haste consistent with care.

AMONG BOARDS OF EDUCATION.

Duluth, Minn. Additional special schools, including open-air classes, and classes for deaf pupils and mentally retarded children, are planned for the next school year.

Cheyenne, Wyo. The board has prohibited the use of the school gymnasium for public dances. In the future, only persons associated with the schools, or those who are invited by pupils or teachers, may attend dances in the schools.

Pasadena, Cal. The board has opened the school playgrounds for summer use.

Houston, Tex. The board has made arrangements for a free summer school during the vacation.

Providence, R. I. The board has revised its by-laws. The most important change is the provision that the superintendent shall be elected in July for a two-year term.

City Attorney Long of San Francisco, Cal., has rendered an opinion in which he upholds the right of the board to suggest out of what fund payment for the construction of school buildings and other work shall be made. The finance and building committee of the city supervisors held that recommendations from the board of education and board of works should be confined to the work to be done, and that the designation of the fund should be left to the supervisors.

Ipswich, Mass. The school board has opened a summer school. School gardening, manual training and academic subjects are offered.

New York, N. Y. The board of education has refused to close public school buildings to organizations which have held meetings regularly in the assembly rooms. A few of the members were of the opinion that the board was unfaithful to the city in allowing certain organizations to meet in the buildings. The entire discussion had its origin at a recent meeting of the Labor Forum in the Washington Irving High School, when it was alleged one of the speakers spoke disrespectfully of the American flag.

South Bend, Ind. The board has created the office of business manager and assistant to the superintendent of schools. He will have charge of the purchasing of supplies and will handle all the details in connection with school finances.

Norfolk, Va. The board has employed a firm of expert accountants to audit the books and to install a system of accounting. The aggregate cost is limited to \$300.

Fort Dodge, Ia. The board has opened a summer school for advanced students and those who have fallen behind in class work.

Minneapolis, Minn. The summer schools will be reopened with increases in enrollment. The cost of the schools is \$20,000.

New Haven, Conn. The board has adopted a resolution prohibiting the use of Shakespeare's "Merchant of Venice" and Lamb's "Tales from

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Be Sure to See the EMPIRE MOVABLE and ADJUSTABLE CHAIR DESK



TUBULAR STEEL Frame Construction.

ADJUSTMENTS—Are the simplest and meet every requirement—can not get out of order.

DESK TOP can be raised to permit easy entrance and egress. Desks can be arranged close together for group work. A side aisle is not necessary as desks can be entered from the front.

DETACHABLE DESK TOP makes an ideal equipment for assembly purposes or social center work.

HYGIENIC BACK with curved upright banister.

BOOK DRAWER is exceptionally large.

TILTING TOP eliminates stooping over books and gives correct angle of vision.



This desk will be on exhibition at the convention of the National Education Association, Booth 40, Madison Square Garden New York, July 3 to 7. We shall be glad to see you there.

EMPIRE SEATING CO., Inc. 244-248 GRANITE BLDG. ROCHESTER, N. Y.

Shakespeare." It is planned to compile a volume, omitting the Merchant of Venice. The action was taken following a request of Jewish citizens.

Lake Charles, La. The parish school board has readopted its policy prohibiting the use of school buildings for dances. The application of a citizen for the use of one of the schools during the summer has been denied.

Dayton, O. The board has begun a census of school children between 6 and 21 years of age.

Youngstown, O. The board has discontinued aesthetic dancing in the schools. The action followed the receipt of more than two thousand petitions from citizens asking that the subject be eliminated.

Sacramento, Cal. Upon the recommendation of Supt. Charles C. Hughes, the board has adopted the "companion class" plan for the city schools. According to the new plan, each classroom is in use all the time. The schools are divided into two sets of classes and all work is of two varieties, namely, foundation work and applied work. In the third, fourth and fifth grades, there are 29 recitation periods and sixteen study periods weekly for foundation work. Twenty-five recitation periods of applied work are provided. There is no study period for applied work.

Under the plan, there are two opening and closing hours. One set of pupils comes on at 8:45 and leaves at 11:25 A. M. Another arrives at 9:25 and leaves at 12:00 noon. In the afternoon, one set returns at 12:50 and the other at 1:25 P. M. The board has organized grammar grade classes at three schools and intermediate classes at two schools.

St. Paul, Minn. The city council has ordered a complete survey of the public school system. The cost is limited to \$10,000.

New York, N. Y. To abolish part-time and double-session classes, to avoid the use of unsatisfactory and emergency classrooms, and to reduce the size of classes, the board of estimate has voted unanimously an appropriation of \$5,900,000 for alterations and equipment for old buildings, for new sites, for the construction of new buildings and for additions to present buildings.

President William Hood of the board of edu-

cation, Racine, Wis., has recommended that a ninth and a tenth grade be established in each of the ward schools. The new grades are to serve the needs of students who have graduated from the elementary grades and who are too young for work. Those who wish to enter the high school may obtain credit for the work completed.

Oklahoma City, Okla. The adoption of a modified form of the Gary plan is planned for the high school in September. The building was built to accommodate about 1,600 students and since September the enrollment has been 1,800. It is estimated the enrollment in September of next year will be increased by four hundred students, owing to the establishment of industrial plants and the growth of the city.

Joliet, Ill. A six weeks' summer school has been opened.

Peoria, Ill. The finance committee of the board has recommended that an expert be employed to conduct a survey of the schools.

Greenville, O. A summer school has been established for over-age pupils and for those who are weak in certain subjects. A tuition fee of \$2 will be charged in the high school but no fee will be required of grade students.

The mandamus action brought by Wilson B. Evans against the board of education of Washington, D. C., to reinstate him as principal of Armstrong Manual Training School and director of the colored night schools, has been dismissed by the courts. Mr. Evans sued the board to reinstate him, on the grounds that he was dismissed without a hearing and that the procedure was not lawful.

The court held that "it has no authority to act as a court of appeals from a decision of the board," and "the board, having reached the decision in good faith, its action, even if mistaken, cannot be overruled."

Supt. M. C. Potter of Milwaukee has arranged that during the month of June, principals may call upon substitute teachers to assist them in clerical work incident to the closing of the school year. In large schools usually four or five days of work by a substitute are sufficient to cover all of the necessary routine of tabulating and filing reports, taking inventories and closing up the school records.

Supt. F. B. Dyer of Boston, Mass., has recommended that the two-platoon system of organization be introduced in the South Boston, Dorchester, West Roxbury, English and East Boston High Schools in September. In one of the schools it is planned to have part of the pupils attend the morning session and the remainder the afternoon session. The arrangement reduces the hours of attendance from five to four hours.

At the English High School, it is planned to have the second-year class and a part of the first-year class organized on the two-platoon system. Each section will have eight hundred students.

Providence, R. I. The board has adopted a rule providing that the compensation of janitors, engineers, assistants and other employees for attendance and service outside of school hours shall be fifty cents per hour for each hour or fraction of an hour. Such service and compensation must begin one-half hour before the stated time for opening the meeting, entertainment or occasion, and must continue for one-half hour after all persons have left the building.

Meetings, entertainments or other events which continue after twelve o'clock midnight will be subject to a rate of \$1 per hour for each hour or fraction of an hour.

Lynn, Mass. At a recent meeting of the board, Supt. Charles S. Jackson recommended a trial of the Gary plan of organization at the Breed School. Supt. Jackson presented a rather complete schedule for the operation of the plan. In addition, he recommended that a study of general science of all kinds be introduced for the extra time not covered by the schedule. The change will mean a six-hour day and double shifts of classes.

Port Huron, Mich. The board has adopted a resolution requiring that the detail work of the board and its business transactions be open to the public. The official proceedings of each meeting will be published in the local weekly newspaper.

Des Moines, Ia. The board has established a summer school in the East High School. Work in first, second and third-year English, first and second-year mathematics, and in various commercial subjects will be offered. Pupils who complete the work will receive credit toward graduation. The course covers eight weeks.

The Desk That Is Different From All Others



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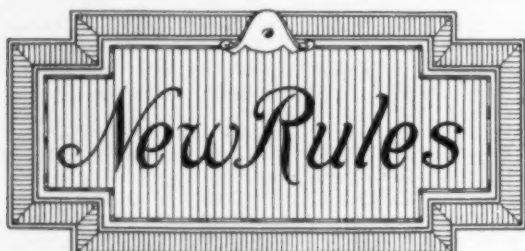
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Selection of Teachers.

Kewanee, Ill. The board has adopted a set of rules governing the selection of new teachers and the reappointment of old teachers. The rules offer special inducements to teachers for improving themselves professionally.

In making recommendations of employed teachers at annual elections, the superintendent is required to give the following information concerning applicants:

Number of years' experience in teaching in local schools, and in other school systems; kind and character of work done during current year; kind and quality of academic preparation, and of professional training; number of weeks' attendance at normal schools and amount of extension work undertaken; number of professional credits earned.

In making promotions, where several teachers are recommended, the board will give preference to teachers long in service and who have improved themselves professionally.

To encourage teachers in professional improvement, it is provided that any teacher of more than one year's service, with the approval of the superintendent, may obtain a year's leave of absence to pursue a course of professional study. Applications for such leave of absence must be filed at least thirty days preceding the beginning of the proposed absence.

In the employment of new teachers, the board will be governed by the following rules:

1. Applicants must file an application with the superintendent of schools on the "official" application blank. The superintendent shall carefully investigate the record and qualifications of

each applicant and make a recommendation to the board based on his findings.

2. To be eligible to an appointment to a regular position in the schools a candidate must have the following qualifications:

Elementary Schools.

1. Graduation from the Kewanee High School or the equivalent.

2. Must hold a valid certificate of at least the second grade. Other things equal, preference will be given to those candidates who hold a higher grade of certificate than the minimum requirement.

3. Must have at least two years' experience, must have at least twelve weeks' professional training in an approved professional school or the equivalent. Other things equal, preference will be given to those having more than the minimum amount of professional training and experience. Successful experience of at least one year in a graded school employing a superintendent or principal who has supervisory authority may, in the discretion of the board, be regarded as the "equivalent" of twelve weeks of professional training.

4. No one shall hereafter be considered eligible to the position of "cadet" in the schools who has not successfully completed an amount of work in education equivalent to two units, the amount now offered in the high school.

High School.

High school teachers must meet the requirements of the North Central Association of Colleges and Secondary Schools of which Kewanee High School is an accredited member.

The association requires that high school teachers of all academic subjects must be graduates of a recognized college or university which requires four years of high school work for entrance and four years of college work for graduation.

NEW RULES AND REGULATIONS.

The Chicago board of education is considering a rule which will make the annual election of teachers more than a formality. In substance the rule provides that teachers shall be appointed for a period of one year only and that re-election

shall constitute a definite agreement for a year's service. The purpose is to afford a comparatively easy method of dropping inefficient teachers who may have received a rating which entitles them to re-election. The rule is directly a contradiction of recent movements for making the tenure of teachers permanent after a period of probation.

New York, N. Y. The board has revised the rule governing the appointment of elementary teachers of vocational and trade subjects. The rule reads:

"To be eligible for license as teacher of vocational or trade subjects in an elementary school, the applicant must have the following qualifications:

"Five years' successful experience as a journeyman wage-earner or in a higher position in the vocation for which the applicant seeks a license, together with one year's successful service in teaching the same vocational or trade subject."

Lincoln, Neb. The board has adopted a rule prohibiting the exhibition of motion picture films which tend to advertise the products or service of any concern. The ruling became necessary when certain sales agents for automobiles requested that their films and lecturers be permitted to appear before the children.

The Erie Board of School Directors has begun the publication of a monthly bulletin for distribution among citizens and school patrons. The first issue is a twelve-page pamphlet. It contains a complete explanation and a detailed tabulation of the school budget for the coming year. Two new school buildings, which are approaching completion, are described for the benefit of citizens who may be interested.

The School Board at Pueblo, Colo., has selected Mrs. Mary A. Ruegnitz as president for the ensuing year. Mr. W. S. Marble, whose term expired as a member, has been reappointed for one year.

Boston, Mass. The board has appropriated \$300,000 for a site for an administration building, and for the construction and furnishing of the same.

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Made with fixed, lifting lid or sliding top boxes, in six sizes.

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Movable Study Desks and Chairs
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To save you freight and to insure quick deliveries a large stock of desks is carried in our representatives' warehouses in Cleveland, O., Minneapolis, Minn., Kansas City, Mo., Dallas, Houston and Longview, Tex., Ft. Smith, Ark. and New Orleans, La., as well as at factory.

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A SURVEY OF HANDWRITING.

Every little while someone rises to say that the child in the schools of today doesn't write as well as those of former days; that he doesn't add, subtract, multiply or divide as well as the child of earlier times.

Supt. J. H. Harris of Dubuque, Ia., assisted by Mr. Anderson, school statistician, has recently completed a study of the handwriting in the public schools which was made to test the efficiency of the public school children in this subject. The survey which has been issued in the form of a report, gives the results of a study of two hundred samples of handwriting. The present study is to be followed by a series of tests in other common school subjects.

The study is divided into two sections, namely, speed and quality of work. In the schools the aim in penmanship has been to develop speed, commensurate with quality. Tests were conducted in each grade to indicate the fast, slow and average writers.

In the third and fourth grades, the children were asked to write a short sentence of five words, repeating it as often as they could in the space of two minutes. The same method was pursued in the higher grades with a longer sentence.

The average or medium rate of writing by grades for the city of Dubuque, and for the state as a whole, are as follows:

Third grade, Dubuque, 53.9, Iowa, 49.6; fourth grade, Dubuque, 67.6, Iowa, 61.9; fifth grade, Dubuque, 66.5, Iowa, 65.5; sixth grade, Dubuque, 78.3, Iowa, 75; eighth grade, Dubuque, 85 and Iowa, 76.5.

The tests for quality which were made with the aid of the Ayres scale, included a study of 1,578 specimens of grammar-grade children. These were ranged on a percentage scale from 20 to 90; the former indicating the poorest quality and

the latter the best quality of writing. Intermediate qualities ranged between these points. The average quality of penmanship for each grade for Dubuque, and the state as a whole, are:

Third grade, Dubuque, 41.4, Iowa, 39.8; fourth grade, Dubuque, 47.1, Iowa, 44.5; fifth grade, Dubuque, 50, Iowa, 49.1; sixth grade, Dubuque, 53.4, Iowa, 52.3; seventh grade, Dubuque, 54.5, Iowa, 57; eighth grade, Dubuque, 62.2, Iowa, 61.

BUSY SUPERINTENDENTS.

Supt. Homer P. Lewis, of Worcester, Mass., in a special report to the board, recommends the adoption of the six-three-three plan for the school system. Mr. Lewis gives an outline of changes which would be necessary if the proposed plan is adopted, and presents three reasons why it would be desirable for the city.

The annual commencement exercises of the public schools of Statesville, N. C., were held May 22nd. A class of twenty was graduated.

The program, in addition to the graduating exercises, consisted of the presentation of prizes, medals and scholarships, and the reading of an anniversary poem by a graduate of the class of 1911.

A medal offered by the local D. A. R. was awarded to the student having the best paper on history. There were also prize medals for the best intermediate exhibit, the best paper on advertising and the best paper on the care of children. Scholarships were presented to three students.

A radical revision of the grading of classes in the Beverly, Mass., schools has been in effect since September, 1915.

The course of study has been revised to outline carefully the work for each fourth of the normal school year. Where possible, classes will be divided into three sections in the essential subjects. In the larger schools the divisions will be separated into separate classes.

Between September and June, one of these divisions, (a) has done three-quarters of work outlined in the course of study, another (b) has done four-quarters or a normal amount, and the other division, (c) has done five-quarters of work and has thereby gained one-fourth of a year's work.

Pupils may be in one division one year and in

another division the next, these groups being formed at the close of each year in June and each pupil being placed where he can do his best work. Individual readjustments may be made during the year as circumstances warrant.

Below is a graphic illustration of the plan:

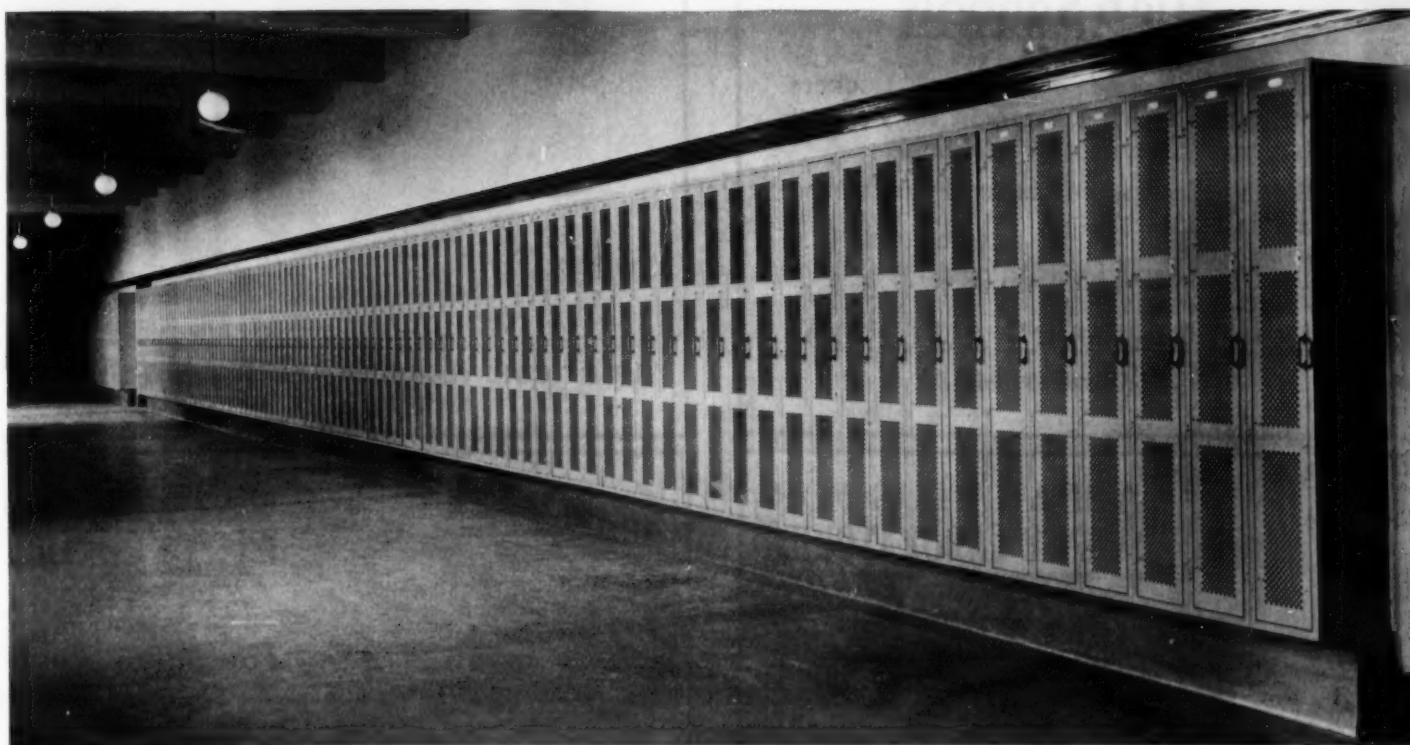
Grading Plans Grades I-VI								
Division A			Division B			Division C		
Sept.	4	3	Sept.	4	3	Sept.	4	3
	2	1		2	1		2	1
Sept. 1 Gr. VI A1			Sept. 1 Gr. VI B1			Sept. 4 Gr. V C4		
	4	3		4	3		4	3
	2	1		2	1		2	1
Sept. 2 Gr. V A2			Sept. 2 Gr. V B1			Sept. 3 Gr. IV C3		
	4	3		4	3		4	3
	2	1		2	1		2	1
Sept. 3 Gr. IV A3			Sept. 3 Gr. IV B1			Sept. 2 Gr. III C2		
	4	3		4	3		4	3
	2	1		2	1		2	1
Sept. 4 Gr. III A4			Sept. 1 Gr. III B1			Sept. 1 Gr. II C1		
	4	3		4	3		4	3
	2	1		2	1		2	1
Sept. 1 Gr. II A1			Sept. 2 Gr. II B1					
	4	3		4	3			
	2	1		2	1			
Sept. 2 Gr. I A2								
	4	3						
	2	1						
Sept. 3 Gr. I A3								
	4	3						
	2	1						
Sept. 1			Sept. 1			Sept. 1		

When the system is in full working order—at the end of about three years—there should be necessity for very few non-promotions. Nearly every pupil will be able to continue his work without repetition but some pupils will take a longer time to cover the work of the course than will others.

A state-wide spelling bee will be held September 12, 1916, at the Syracuse, New York, State Fair Grounds. Each county in the state will be represented. The contestants will be chosen by preliminary bees, conducted in each supervisory district by the respective superintendents of schools.

Boys or girls at present enrolled in public or

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private schools, or those who have obtained work permits, are eligible to compete in the preliminary contest. The winners in these initial contests will compete in contests to be held at the county fairs or at other designated places.

The State Department of Agriculture, under whose direction the contest will be held, has prepared a list of about four thousand words as a basis for the proposed spelling bee. Prizes in gold, amounting to \$50, will be given to the four winners of the contest by the Fair Commission. In addition, each contestant will receive an engrossed certificate of proficiency in spelling, and will be reimbursed for his or her round trip railroad fare.

The contest will be conducted at the Fair Grounds by Dr. John H. Finley, State Commissioner of Education. At the close of the activities, the contestants and Dr. Finley will be the guests of the Commissioner of Agriculture at a luncheon. There will also be personally conducted tours of the grounds, including exhibition buildings, races and entertainments.

The Los Angeles (Cal.) board of education has dropped nearly fifty teachers and principals from its list for the school year 1916-17. The action of the board is the result of a campaign to weed out inefficient and incompetent teachers.

Lynn, Mass. The local association of printers has asked the board to prohibit pupils in the print shop from doing commercial work. The printers allege that the schools charge such low prices that customers believe they are paying exorbitant prices for work. It is recommended that an experienced printer be employed to give practical instruction in the school shop.

The High School at South Milwaukee, Wis., held on June 9, its second annual exhibition and "open" session under the supervision of Supt. F. W. Hein. Specimens of work were presented by the domestic science and arts department, by the manual training department, by the commercial department, by the science and the academic departments. Demonstrations of actual classroom work were in progress in the course of the evening. Gymnastic exercises and a may pole drill were given in the gymnasium.

Freeport, Ill. The board has discontinued the special instructors for physical training.



PERSONAL NEWS OF SUPERINTENDENTS

Mr. Newton W. Speece of Red Lake Falls, Minn., has been re-elected for the next two years.

Miss Mary C. Mellyn, Director of the Department of Teacher Practice and Training, Boston, Mass., has been elected assistant superintendent of schools to succeed Walter S. Parker resigned. Miss Mellyn will continue as director of the Teacher Training Department.

Charles W. Bickford of Manchester, N. H., has been elected superintendent of schools at Lewiston, Me. He succeeds D. J. Callahan.

Louis P. Benezet of La Crosse Wis., has been unanimously elected superintendent of schools at Evansville, Ind.

The finance committee of the Milwaukee board of education has recommended that the salary of Supt. M. C. Potter be raised to \$7,500, and that this amount include the purchase and maintenance of an automobile.

Frank S. Currier, chairman of the school board of Natick, Mass., has resigned.

Charles M. Gill of Teachers' College, St. Louis, Mo., has been elected superintendent of schools at Quincy, Ill.

John Girdler of LeGrand Ore., has been elected superintendent of schools at Ogden, Utah. Mr. Girdler entered upon his duties on July first.

J. M. Martin of Huron, S. D., has been elected superintendent of schools at Bismarck.

Supt. L. M. Landrum of Atlanta, Ga., has been re-elected.

Prof. James W. Turner of Stonefort, Ill., on June first concluded his fiftieth year of teaching in Williamson County. The occasion was celebrated with a golden jubilee and a semicentennial reunion of former pupils and friends of Mr. Turner. A barbecue and picnic dinner was served.

John M. Mills, who recently resigned as superintendent of the schools of Ogden, Utah, was presented with a gold watch by the teachers of the city schools, at a farewell meeting given by the

parent-teacher association in the Central High School.

H. O. Dietrich of Curwensville, Pa., has been elected superintendent of schools at Kane, Pa., for a term of two years.

Dr. F. S. Minns, for two years special examiner for tuberculosis for the Toronto Public School, has been appointed Chief Medical Officer of the Board of Education during the absence of Dr. Alex. MacKay on active service with the Ontario Provincial Base Hospital, Orpington, England.

Mr. J. F. Barnhill of Paola, Kans., has been elected superintendent of schools at Parsons to succeed F. L. Pinet, resigned.

Supt. V. L. Mangun of Macomb, Ill., has been re-elected for the ensuing year.

Mr. W. C. French, superintendent of the schools at Lawton, Okla., has been elected president of the School of Technology at Tonkawa.

Mr. Samuel H. Thompson, formerly state superintendent of schools of Tennessee, has been elected principal of a new high school at Powell's Station.

Mr. John C. Hoekje, of Grand Haven, Mich., has resigned to become a member of the faculty of the Western State Normal School, Kalamazoo.

Mr. Grant C. Grumbine has resigned as president of the Northwestern State Normal School, Alva.

Miss Millie C. Mason, for thirteen years clerk of the board at Muskegon, Mich., has resigned.

Supt. James H. Tomlin of Evansville, Ind., has announced his resignation, to take effect at the close of the school year.

Mr. Charles M. Herlihy, formerly sub-master at the Thorndyke School, Cambridge, Mass., has been appointed Assistant Superintendent of Schools.

Supt. Frank W. Miller of Dayton, Ohio, has been re-elected for a five-year term, with a salary of \$6,000 per annum. The re-election followed a spirited discussion of the advantages and disadvantages of a longer term for the superintendent. It is the opinion of a majority of the board that a superintendent can perform the work of his office only when he is given an opportunity to carry out a definite program, and sufficient time in which to do it.

Mr. Alfred W. Beasley, for 27 years principal



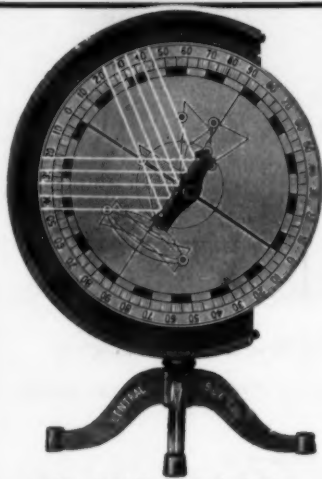
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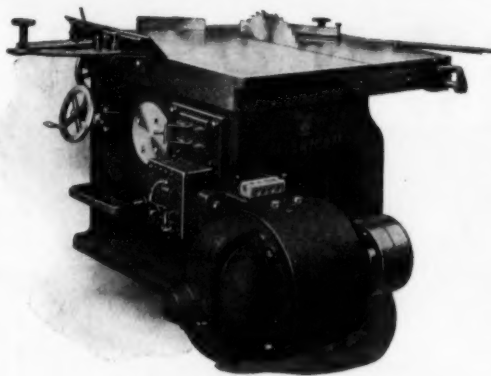
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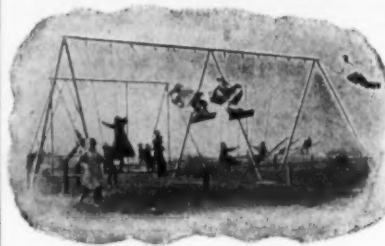


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consult the School Authorities of Buffalo, Jersey City, Memphis, San Francisco, Winnipeg, Rochester, and a hundred other cities we could name if space permitted and learn what they think of American Wood-working Machinery for Manual Training Work.

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of the high school, Peoria, Ill., has been elected superintendent of schools, to succeed G. T. Smith.

Mr. William Orr, formerly principal of the Springfield High School, and for the past six years Deputy Commissioner of Education for Massachusetts, has announced his resignation, to take effect September first. Mr. Orr has been appointed general superintendent of the educational work of the Y. M. C. A. on the North American continent.

Mr. Charles W. Bickford, for sixteen years superintendent of schools at Manchester, N. H., has announced his resignation, effective with the close of the school year.

Supt. Charles N. Perkins of Augusta, Me., has been re-elected.

Mr. John Girdler of LeGrand, Ore., has been elected superintendent of schools at Ogden, Utah, to succeed John M. Mills.

Mr. John Reardon, secretary of the school board at Waukegan, Ill., is serving his thirteenth term in that capacity.

Mr. Oren A. Barr of Eldorado, Ill., has been elected superintendent of schools at Carthage, Ill.

Mr. R. C. Taylor, secretary of the school board at Norfolk, Va., is recovering from an operation performed at the local hospital.

Mr. Horace M. Buckley, head of the Elgin Academy, Elgin, Ill., has resigned to accept the superintendency at University City, Mo.

Mr. H. A. Carroll, principal of the high school at Lawton, Okla., has been elected superintendent of schools to succeed W. C. French, resigned.

Supt. R. G. Jones of Rockford, Ill., has been re-elected, with a salary of \$4,500.

Supt. O. P. Bostwick of Clinton, Ia., has been given a salary of \$3,000 for the ensuing school year.

Mr. Geo. W. Auch of Detroit, Mich., has been elected president of the board to fill the unexpired term of the late Dr. McMichael.

Supt. R. J. Tighe of El Paso, Tex., has been re-elected.

Mr. Charles M. Gill, of the Harris Teachers' College, St. Louis, Mo., has been elected superintendent of schools at Quincy, Ill.

Supt. J. K. Baxter of Canton, O., has been re-elected for a two-year term.

Supt. P. W. Horn of Houston, Tex., has been

re-elected for his seventh consecutive term.

Supt. R. C. Smith of Pekin, Ill., has been re-elected.

Supt. Clarence L. Wright of Huntington, W. Va., has been re-elected.

Mr. Frank L. Crone, Director of Education in the Philippines, has announced his resignation, to take effect June 15th.

Mr. E. S. McCabe, for fourteen years superintendent of schools at Kingfisher, Okla., has resigned. Mr. McCabe is the oldest city school superintendent, in point of service, in the state. Mr. J. E. Arendell of Ponca City, will succeed him.

Mr. Rupert Asplund, formerly assistant state superintendent of schools of New Mexico, has announced his candidacy for the office of state superintendent. Mr. Asplund is a native of Illinois and a graduate of the Illinois College.

Supt. W. R. Rutherford of Eugene, Ore., has been re-elected for a two-year term.

Mr. Gordon B. Smith of Grand Forks, N. D., has been elected superintendent of schools at LaMoure.

Supt. John S. Alan of Salem, O., has been re-elected for a fourth term. The salary will be \$2,400 for the next two years, and \$2,500 for the following three years.

Mr. C. J. Brewer, superintendent of schools at Chippewa Falls, Wis., has resigned to accept the position of head of the training department of the Eau Claire Normal School.

Mr. Byron J. Read has been elected superintendent of schools at Silver City, New Mexico, with an annual salary of \$1,800. The Silver City board made its election without an application on the part of Mr. Read.

Onawa, Ia. Supt. Leon O. Smith has been unanimously re-elected and his salary increased to \$1,700.

Supt. D. B. Hoffman of East Moline, Ill., has been re-elected for his eleventh consecutive term.

Timothy Cramer, for 29 years superintendent of school buildings at Muskegon, Mich., has resigned. Mr. Charles W. Lindquist has been named to succeed him.

Supt. F. W. Crawford of Three Rivers, Mich., has been re-elected for the ensuing year.

Mr. Ossian H. Lang, formerly editor of the *School Journal* and of *Educational Foundations*,

has been elected president of the school board at Mount Vernon, N. Y. Mr. Lang carried the city by a plurality of 36.

Mr. J. E. Byers, for twenty years president of the board of education at Ottawa, Kans., died on June 4th at his home, at the age of 73.

Mr. Jesse M. Warren, Butte, Mont., has recently taken over the business of Messrs. Wilson & Cutting of Butte, Mont. Mr. Warren is specializing in school architecture.

Supt. Thompson Celebrates Twenty-fifth Anniversary.

A reunion of former teachers, pupils and school board members was held May 18th at Statesville, N. C., in connection with the closing exercises of the school year. The occasion was also a celebration of the twenty-fifth anniversary of Supt. D. Matt Thompson as head of the school system.

During the evening, short talks were given by former pupils and principals, some of which were reminiscent and some commending the work of the superintendent. An original poem, compiled by a former pupil of Mr. Thompson's, was read.

At the conclusion of the evening's entertainment, Supt. Thompson was presented with a loving cup by the teachers and pupils, a cane by the school board members, and a gold watch by the former graduates of the schools.

In Memory of Andrew S. Draper.

The school teachers of New York State have undertaken the erection of a suitable memorial to the memory of the late Dr. Andrew S. Draper, formerly State Commissioner of Education.

The memorial, which will take the form of a bronze tablet, with a life-size figure in bas-relief, will be placed at the foot of the main entrance to the State Education Building. The memorial, which will be designed and executed by Mr. Charles Keck, will cost about \$10,000.

Dr. Draper was state superintendent from 1886 to 1892 and was the first Commissioner of Education, serving from 1904 until his death in 1913. The great building which he was so instrumental in securing for the state and which will stand as convincing evidence of the high, disinterested service of Dr. Draper, has been chosen by the teachers of the Empire State as the place for their permanent tribute to him.

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HEALTH RULES.

Portland, Me. The city board of health has adopted a set of regulations governing the conduct of children in the schools in cases of contagious or infectious diseases. The rules read:

Chicken Pox.

Patient excluded from the school 21 days. Children in the same home who have had chicken pox need not be excluded from school, but those who have not had the disease should be excluded twenty days.

Diphtheria.

Children should not return to school for seven days after quarantine has been removed by the board of health.

Children and teachers who have been immunized and cultures from whose nose and throat are negative, provided they have made a change in their residence, may return to school. If not immunized and cultures are not negative children and teachers, even tho the address is changed, shall not return to school for seven days. If they remain at their own homes until the case is terminated they shall not be readmitted to school until seven days after quarantine has been terminated.

Epidemic, or Septic Sore Throat.

Persons who have had this throat trouble should not return to school until a week has passed since apparent full recovery and the disappearance of all throat troubles.

Children from the house in which there are cases of septic sore throat shall not be allowed to attend school until the sick ones are completely recovered and then there should be an assurance from the family physician that the throats of those who have apparently escaped the disease are in a normal condition.

German Measles.

The patient should be excluded from school

while the quarantine lasts. Children who have already had an attack of German measles need not be kept from school, but those who are not immuned should not be admitted to the school for three weeks.

Measles.

Children exposed to measles who have not had the disease must be excluded from school for two weeks.

Children sick with the measles must be excluded from school three weeks.

Children and teachers in the family who have had measles may continue at school if they are isolated from the other members of the family.

Mumps.

The patient should be excluded from school for at least one week after the swelling has entirely subsided.

Children and teachers who have had the mumps need not be kept from the schools but they should keep themselves removed from the immediate presence of the sick one.

Children in the same family who have not had the disease should be excluded from the school for three weeks.

Infantile Paralysis.

The patient should not be permitted to attend school for six weeks. The well children of the family will not be permitted to attend school until they have permission from the board of health.

Scarlet Fever.

The patient should not be re-admitted to school until seven days after release from quarantine and then, before the child goes back to school, a second examination must be made to show that desquamation has ceased and that the nose, throat and ears are in normal condition.

Immune children, those who have had scarlet fever, may be excluded from school only until arrangements can be made for changing their

domicile and they can be given a bath and clean clothes. Arrangements should, however, be made which shall insure that they may be no possibility of their returning to their homes so that they may become the bearers of infection. Teachers must change their address and stay away from the schoolroom and from other pupils.

Children who have never had scarlet fever shall be excluded from the school for seven days after removal of quarantine or seven days after their disinfection and removal from the infected house with no return to their homes for seven days after it has been disinfected.

Small Pox.

Children from infected households shall be barred from school for two weeks after the family have been released from quarantine.

Tuberculosis.

Tubercular children who are giving off infection shall be excluded from the schools, both for their good and for the safety of others.

Typhoid Fever.

Before pupils who have had typhoid fever are re-admitted to the schools they should furnish a certificate of their complete recovery.

Children from infected houses should not attend school if they have diarrhoea or any symptoms indicating the possibility of the onset of typhoid fever.

Whooping Cough.

Children who have whooping cough should be excluded from the school for a period of six weeks.

Children who have had whooping cough may continue to attend school if they keep away from the sick, but the children of the same family who have never had whooping cough and who remain exposed should be excluded for fourteen days after the release of the patient.

MEDICAL INSPECTION.

That the medical inspection department of Cincinnati is doing good work in remedying physical defects of school children, is brought out in a report by Assistant Health Officer William H. Peters. Since the beginning of the school year, glasses were obtained for 673 children with defective vision. Dr. Peters says that 855 cases were closed, with restoration of normal



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vision or improvement in 79 per cent of the cases. Follow-up work was discontinued in 182 cases because the parents refused to co-operate.

Since September, 521 children have been operated upon for diseased tonsils and adenoids. In two hundred cases, the parents refused to do anything or had left town. It is the purpose of the medical inspectors to have a large number of cases attended to during the summer vacation.

Danville, Ind. A medical examination of the school children has been made under the auspices of the welfare department of the Women's Club.

Plymouth, Mass. The school authorities and local dentists have co-operated in the conduct of a school clinic. Children may have teeth extracted or filled for the small sum of ten cents. Toothbrushes and tooth powder are kept in stock and sold to the pupils at five cents each.

North Springfield, Mass. A school dental clinic has been opened in one of the school buildings. The clinic is conducted jointly by the school authorities and the local dentists.

Fitchburg, Mass. A municipal dental clinic has been opened in the Day Street School. The clinic is open three mornings each week for the benefit of children whose teeth need attention. A special operator is employed.

Philadelphia, Pa. The nurses' corps of the public schools has made arrangements for sending a company of crippled, anaemic and sickly boys and girls to the seashore and country. Thru an arrangement with one of the railroads, the children travel at a reduced rate. The parent usually pays the carfare and the charitable organizations bear the other expenses. Last year 250 children obtained outings thru the work of the school nurses.

Kansas City, Mo. The board has established an open-air school on the grounds of the Humboldt School.

Richmond, Va. A dentist has been employed to care for the teeth of school children. The term of employment is from October to July.

Rules for Communicable Diseases.

The city health officer of Attleboro, Mass., has issued a set of rules governing the isolation and exclusion of children from school because of communicable diseases.

"Chickenpox, diphtheria, measles, German

measles, mumps, scarlet fever, smallpox, acute or septic sore throat, whooping cough, pediculosis, impetigo contagiosa, scabies, ringworm and ivy poisoning are diseases in which those afflicted must be excluded from school.

"Other children in the same household with the afflicted patient must also remain away from school except in the case of sore throat, pediculosis, impetigo contagiosa, ringworm and ivy poisoning. Immune children in the same household, namely, those who have had the disease, may attend school except in case of diphtheria, scarlet fever and smallpox.

"Children who have been exposed to the disease and are not immune, must be excluded from school, except in the case of sore throat, pediculosis, impetigo contagiosa, scabies, ringworm and poisoning. Other children who have been exposed but are immune, may attend school, except in case of diphtheria and scarlet fever.

"Children afflicted with chickenpox must remain away from school at least fourteen days, or until all scales are shed. Other children who have been exposed must be excluded until the twenty-second day after the child last saw the afflicted one.

"Other diseases and the regulations governing the duration of exclusion from school are:

Diphtheria, patient excluded until ten days after second negative nose and throat culture, other children until two cultures taken 24 hours apart from nose and throat are reported negative; measles, until recovery, at least three weeks after acute onset, other children, excluded until fifteenth day after child last saw patient; German measles, until recovery, at least ten days, other children excluded until fifteenth day after child last saw patient; mumps, until swelling has disappeared, at least fourteen days, other children, excluded fifteen days after child last saw patient; scarlet fever, until all scaling and discharges cease, at least 30 days, other children, seven days from the time child last saw patient; smallpox, until recovery and disinfection, other children, excluded until twenty-second day after child last saw patient or seven days after successful vaccination; sore throat, until recovery; whooping cough, six weeks, or until one week after last characteristic cough, other children, fourteen days, provided no cough develops."

BUILDING AND FINANCE.

Waukegan, Ill. The board has concentrated the purchase and recording of school supplies in one official, giving him the entire responsibility for the conduct of the supply department. Mr. L. P. Erskine has been appointed. The new rule provides that requisitions for supplies must come from the superintendent, who in turn sends them to the proper committee for approval. They are finally passed upon by the several committees jointly, and delivered to the purchasing agent. Before bills can be paid, the auditing committee must inspect the requisitions and attach its O. K. The system provides a complete check on all supply purchases.

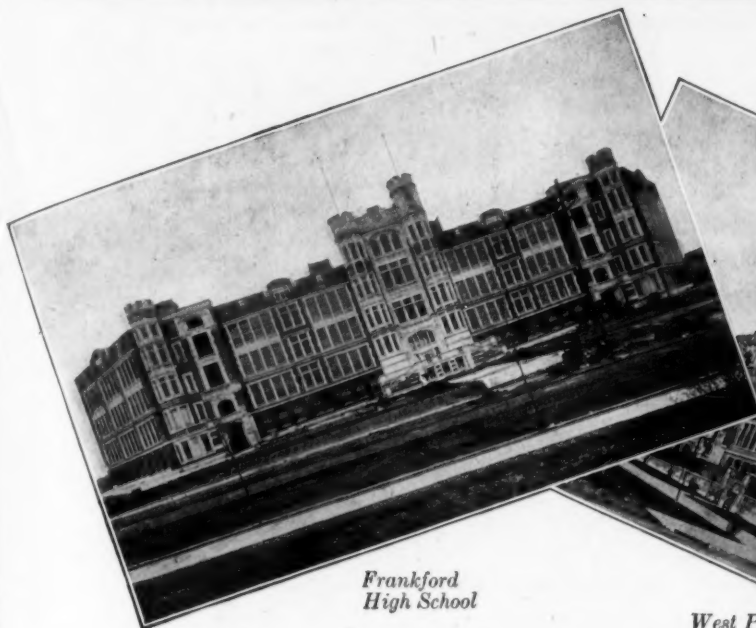
St. Louis, Mo. The schools have taken advantage of the demand for paper stock and the general rise in prices. The school board receives the proceeds from the waste paper in schoolrooms, and the teachers' benevolent association from the newspapers brought from home by the children. Since April, the schools have sold 40,000 pounds of old newspapers at an average price of 47 cents per hundred pounds. It is estimated that there are about 40,000 pounds still unsold.

Ann Arbor, Mich. Because of the continued high price of hard coal, the board has contracted for a supply of soft coal for the next winter.

The superior court of Portland, Me., on May 27th, held a special session to hear evidence relative to alleged attempts on the part of members of the city government to obtain money in connection with the giving out of contracts on a new high school. According to the local press, County Attorney J. H. Berman has contended that he has sufficient evidence to indict and convict a number of persons.

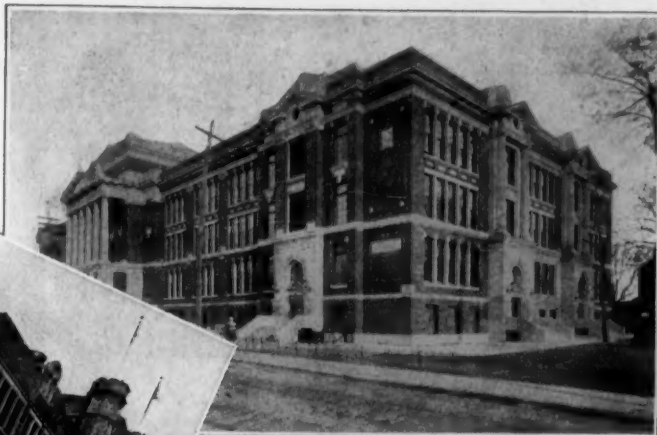
San Francisco, Cal. The board of supervisors has included in the budget for 1916-17 a five-cent levy for school buildings and improvement purposes amounting to about \$270,000.

The Illinois State Department of Public Instruction has recently accepted plans for model two, three and four-room school buildings. The plans will be available for rural school authorities who may be contemplating the erection of schoolhouses. The architect is Mr. Ralph L. Kelley of Urbana.

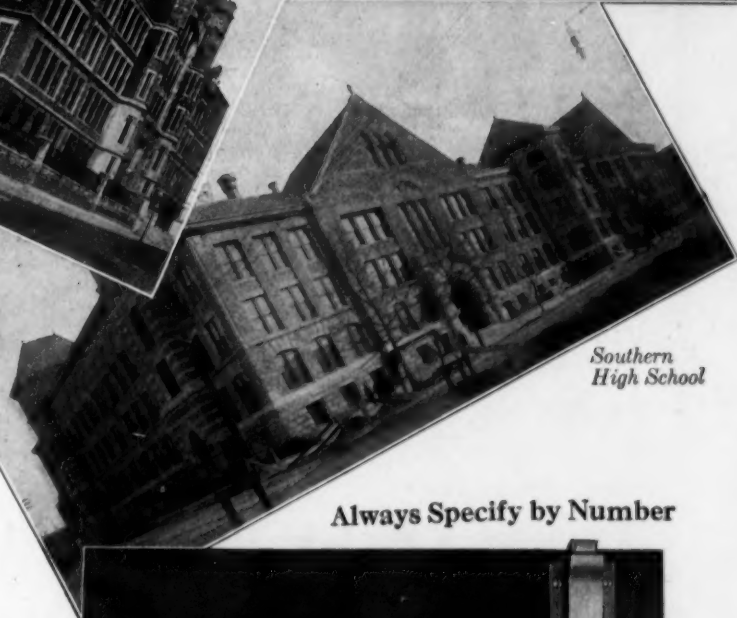


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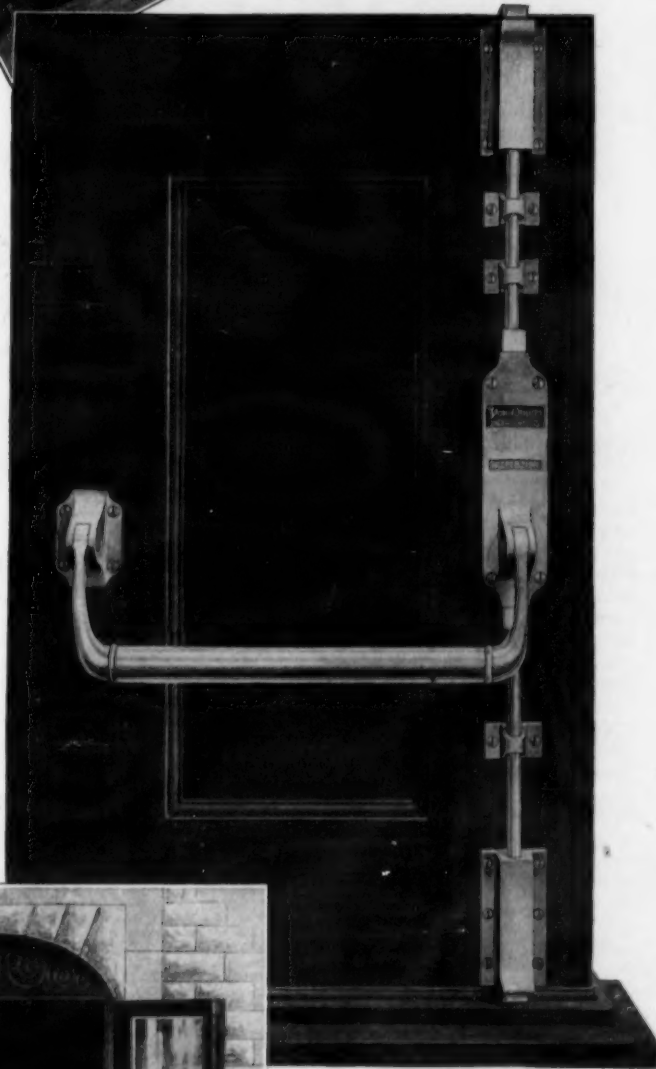
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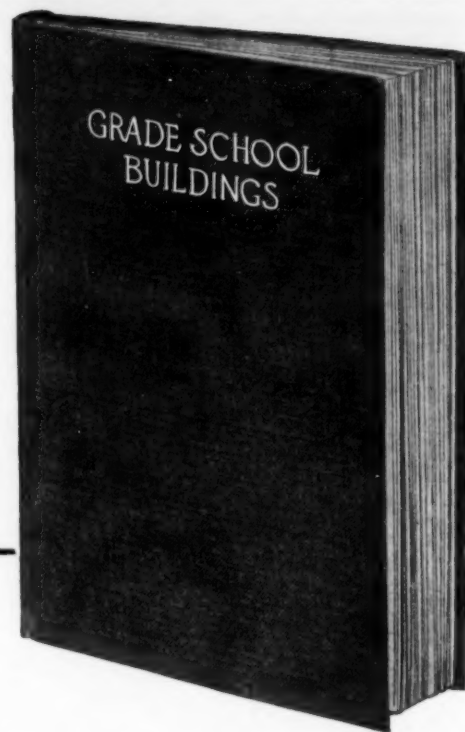
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Teachers' Salaries.

TEACHERS' SALARIES.

Salt Lake, Utah. The board has raised the minimum salary of teachers from \$480 to \$530 per year. The supervisor of the high schools and the supervisor of the grades have been re-employed on a twelve-months' basis. The salary of the former has been raised from \$3,800 to \$4,000, and that of the latter from \$2,400 to \$3,000. The supervisor of primary grades has been re-employed at a salary of \$2,500 per year. The regular increase of \$50 per year has been granted to manual training and high school teachers.

Chillicothe, Ill. The board has adopted a sliding wage scale for teachers, giving all except the primary instructors increases for the next year. New teachers in the first six grades will receive \$52.50 per month. Those re-elected will be paid \$55 per month, with increases of \$2.50 up to the maximum of \$60 per month. The primary, music, sewing, drawing, and seventh and eighth-grade instructors will begin at \$55 per month. Re-elected teachers in these departments will receive \$57.50 per month.

Davenport, Ia. The maximum pay of teachers in the kindergarten has been raised from \$75 to \$80 per month, and that of teachers in the first four grades from \$70 to \$75. The maximum pay of women in the high school has been raised from \$1,150 to \$1,200.

Ashtabula, O. The board has raised the maximum salary of grade teachers from \$66.66 to \$70. High school instructors have been given increases of \$5 per month.

Chicago, Ill. The board has raised the salary of the head of the vocational guidance department from \$1,500 to \$1,600.

Springfield, Ill. The board has adopted a salary schedule for teachers of grade schools, high schools, special subjects and supervisors of special departments. To encourage special work in

summer sessions, the board has ordered that \$30 for a summer term of six weeks, or \$50 for a twelve weeks' term, be given to any principal or teacher who completes a special course in a recognized college or normal. Such teachers or principals must not have reached the maximum salary and must show evidence of having earned full credit. The amount will be paid in installments of \$5 per month, beginning with the first month succeeding the special work.

The following is the schedule of salaries:

Junior high school principals—Minimum, \$1,500, annual increase \$100, and maximum salary \$1,900.

Grade school principals—(a) eight grades—minimum, \$1,200, annual increase \$100, and maximum salary \$1,800; (b) six grades—minimum, \$1,000, annual increase \$100, and maximum salary \$1,500.

Supervisors—Minimum \$1,200, annual increase \$100, and maximum salary \$1,800.

Junior high school teachers—(a) college graduates doing ninth grade work, minimum \$750, annual increase \$50, and maximum salary \$1,000; (b) teachers not college graduates, minimum \$600, annual increase \$50, and maximum salary \$850.

High school teachers—Minimum, \$800, and maximum \$1,200; heads of departments \$1,500 per year, with annual increases of \$50.

Grade school teachers—(a) departmental, seventh and eighth grades, minimum \$600, annual increase \$50, and maximum salary \$850; (b) first six grades, minimum \$500, annual increase \$50, and maximum salary \$800.

Special teachers—(a) graduates from a two-year course of special training, minimum \$750, annual increase \$50, and maximum salary \$1,000; (b) special teachers not graduates of a two-year course of training, minimum \$600, annual increase \$50, and maximum \$850.

Special teachers of manual training—Minimum \$800, annual increase \$50, and maximum salary \$1,200.

A year's leave of absence for professional study granted to a teacher who has not reached the maximum salary is counted as a year of service in determining the salary.

Woburn, Mass. The board has adopted a sliding scale of wages for teachers.

The salaries for women teachers in primary, grammar and high school grades are: Primary, first year, \$400; second year, \$450; third year, \$500; fourth year, \$550; fifth year, \$600; sixth year, \$650. Grammar, first year, \$450; second year, \$500; third year, \$550; fourth year, \$600; fifth year, \$650; sixth year, \$700. High School, first year, \$600; second year, \$650; third year, \$700; fourth year, \$750; fifth year, \$800; sixth year, \$850. The salaries for the sixth year are the maximum for specified grades.

Women teachers in the high school who have been receiving less than the maximum salary, will receive annual increases under the former schedule, until \$750 is reached. Upon attaining the latter salary, teachers may receive annual increases of \$50 until the maximum of \$850 is reached.

Women principals of grammar and primary schools will receive, in addition to their regular salaries, for each grammar or mixed room under their charge, \$25 per annum; for each primary room not including their own, \$12.50 per annum.

It is provided that when a woman teacher or principal in the grammar and primary grades, or a woman teacher in the high school is first elected, her position in the schedule shall be determined by the committee.

The salaries of employees not included in the above schedule must be fixed by individual contract.

Pittsfield, Mass. The board has adopted a new form of contract to be entered into by the board and the teaching corps. Teachers must give four weeks' notice before completing their duties if they desire to resign. Similarly, the city must give the instructors four weeks' notice if it is planned to dispense with their services. It is further provided that in no instance shall the services of teachers be discontinued in September, January or June.



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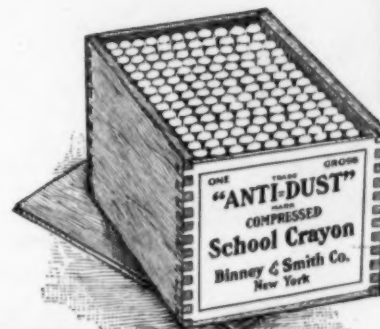
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TEACHERS AND ADMINISTRATION.

Paducah, Ky. The board has adopted a resolution requiring that teachers shall undergo medical examinations once each year, and at such other times as the superintendent may deem necessary. The examining physicians are given authority to say whether a teacher is physically unfit, even tho there may be no evidence of a communicable disease.

Philadelphia, Pa. Upon the suggestion of Supt. John P. Garber, the board has extended the teacher-training course in the Normal School and the School of Pedagogy, from two years to two years and six months. The change has become necessary thru changed conditions of society, requiring that teachers have a broader and more perfect training. The lengthening of the course will relieve the pressure from overcrowded curricula and will enrich the course for prospective teachers, giving them a greater assurance of success and satisfaction in work. Opportunity will be offered for the training of special teachers in sewing, cooking, elementary hand work and shop work.

Detroit, Mich. The board has adopted a resolution making eighteen days the maximum amount of time in any season which any engineer, janitor or other school employe may be absent with pay. Teachers and principals are exempt from the rule.

The Attorney General of Wisconsin has rendered a decision to the effect that supervising school teachers, under the workman's compensation act, are entitled to compensation for injuries received while in the performance of duties connected with their official position. A teacher who had gone on a tour of inspection had been injured by being thrown from a buggy. Following the injury, application had been made for compensation.

Springfield, Ill. To increase the efficiency of the teaching force, the board has adopted a set of regulations governing the appointment of teachers, supervisors and principals. A high school teacher of academic subjects must be a graduate of a recognized college or university, and must have had at least the amount of professional training required for high school teachers by the North Central Association of Colleges

and Secondary Schools. A grade teacher must be a graduate of a four-year high school and must have had at least one year of professional training.

Gloucester, Mass. The board has adopted a rule requiring that applicants for teaching positions in the schools shall be college or normal school graduates, or have had at least one year's experience in teaching. The rule exempts the present pupil teachers from its provisions.

Indianapolis, Ind. The board plans to raise the maximum salary of grade teachers from \$950 to \$1,500. It is estimated approximately \$45,000 will be added to the teachers' payroll.

Los Angeles, Cal. The board has discontinued the contracts of all teachers. It is planned to re-employ those who are to be retained on monthly contracts. The new form of contract will enable the board to engage teachers in accordance with the moneys in the school funds. A second advantage is the opportunity it gives to dismiss teachers and principals without making public the names or number of those who will not be retained. The salaries will be paid in ten, instead of twelve installments, as in the past.

The appointment of new teachers will be upon merit as determined by competitive examinations. Teachers at present employed may not be required to take examinations, but will be re-appointed at the discretion of the board.

Minneapolis, Minn. Applicants for teaching positions in the schools of the Flour City are required to sign a contract signifying their willingness to accept the position proffered, and to abide by the rules and regulations of the board. Teachers who perform extra services at the express direction of the superintendent are entitled to additional compensation as agreed upon between the contracting parties.

Any teacher who is not a member of the Minneapolis Teachers' Retirement Fund Association must accompany his or her signed contract with an application for membership.

Any teacher who is under contract elsewhere for the school year must file a satisfactory written release with the board, or the contract becomes void.

The contract of any teacher becomes void upon his or her failure to pass an examination.

Contracts must be accepted or rejected, signed and returned to the board office within ten days. Failure to do so will be taken as a refusal of the position.

Laurel, Miss. Upon the suggestion of Supt. R. H. Watkins, the board has approved a system of grading for teachers. Teachers are divided into three groups, namely, Class A, Class B and Class C.

Class A or Class B teachers are automatically elected and their salaries fixed. Teachers of Class C must come up for re-election and, if re-elected, are not entitled to increases in salary. As there are no Class C teachers at present, the entire teaching corps has been automatically re-elected for the ensuing year and the contracts renewed.

The board is of the opinion that an efficient system of rating teachers, and substantial increments based upon merit, serve not only to hold the local teachers but also to attract the best instructors from other school systems.

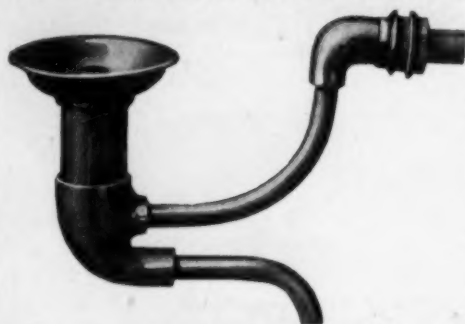
Cambridge, Mass. The board has adopted a set of rules for the government of school athletics. The rules read:

1. The management of school athletics shall be in the hands of the pupils, under the supervision of the Committee on Athletics. There shall be a teacher-manager, appointed by the committee, who shall advise and direct the various student managers, and another teacher who shall act as treasurer, receiving and disbursing all athletic funds arising from gate receipts and other sources. The accounts of the school committee and a balance sheet duly approved by the agent shall be published in the local papers.

2. The rules for the eligibility of players adopted last year shall be continued for the balance of the current school year. An eligibility blank (physical) must be filled out by every candidate for athletic sports, and signed by the principal of the school and by an examining physician appointed by the committee.

3. An appropriation of \$2 must be made for each high school, for membership in the Massachusetts High School Athletic Association.

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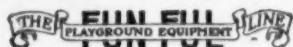
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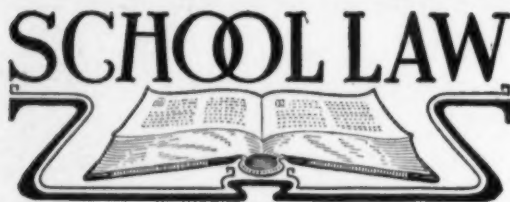


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School Districts.

After ordering an election on a petition to establish a rural special school district, the county judge cannot, before such election, order an election on a petition to establish another such district, including some of the same territory.—Special School District No. 79 v. Special School District No. 2, Ark.

Tho the commission to apportion debts on division of school district, provided for by the South Dakota laws of 1907 (c. 135, § 69), is not a judicial tribunal, and its judgment is final, unless fraudulent or wilfully wrong, the districts are not deprived of the right, under the South Dakota constitution (Art. 6, §§ 2, 20), of having their property rights determined by a regular judicial tribunal.—Smithwick School Dist. No. 6 v. Lincoln School Dist. No. 26, S. D.

School District Government.

Materialmen, by taking notes from a contractor for schoolhouse, do not thereby discharge a contractor's surety from liability on the bond securing payment for labor and materials.—C. A. Burton Machinery Co. v. National Surety Co., Mo.

In materialman's action against surety on bond of contractor for schoolhouse, the fact that contractor, granted extension of time by materialman, was declared a bankrupt, is held not to show that it could have been made to pay prior to bankruptcy.—C. A. Burton Machinery Co. v. National Surety Co., Mo.

School District Taxation.

Where a bank received money of a school district and paid the same out on warrants for the benefit of the district, that the county superintendent did not approve the warrants as provided by the Texas revised statutes of 1911, art. 2756, did not authorize the district to recover the money.—Moody v. Chesser, Tex. Civ. App.

The Australian ballot law does not apply to school district elections on the question of issuance of schoolhouse bonds.—Abrahams v. School Dist. No. 33, Kans.

Ballots cast at a school district election are held improperly rejected, where the intent of the voters could be ascertained from their face.—Abrahams v. School Dist. No. 33, Kans.

Teachers.

A contract of hiring a teacher not signed by one of the directors having no notice of the meeting of the other directors at which the teacher was hired, is held to be ratified and validated.—Watkins v. Special School Dist. of Lepante, Ark.

A contract of employment of a teacher in the public schools at a fixed yearly salary, payable monthly, is entire, and her death during the summer vacation prevents a recovery for the remaining month of the school year.—Donlan v. City of Boston, Mass.

Pupils.

An incidental fee, if reasonable, may be charged a pupil in a district school for use in providing fuel for the school.—Ryan v. Sawyer, Ala.

Under the Alabama code of 1907 (§§ 1697, 1699, 1712, 1713, 1715), trustees of school districts are authorized to require pupil to pay fee of ten cents per month for providing fuel for the school as a condition precedent to instruction therein.—Ryan v. Sawyer, Ala.

A parent may maintain an action on the bond of a township trustee for the failure of the trustee to furnish transportation for the parent's children to school.—State v. Lane, Ind.

Burn's Annotated Statutes of Indiana for 1914, § 6423, impose on a township trustee the duty to make some provision for the transportation of children to school, tho he has discretion as to the means to be employed.—State v. Lane, Ind.

What shall be done in the common schools in an educational way is to be determined at school meetings and by officers of each district as directed by statute.—State v. School Dist. of Nebraska City, Neb.

Municipal Departments and Officers.

The Detroit city charter confers on the board of estimates the power to approve or disapprove the amounts of the salaries of the officers, clerks

and employees of the board of education.—Burton v. City of Detroit, Mich.

Mechanics' Liens.

The statute giving liens for materials used in constructing buildings does not give a lien on a county high school building for brick furnished and used in the construction thereof.—Peters v. Killibrew, Wyo.

Public Officers and Boards.

Under the Nebraska revised statutes of 1913, § 6941, where parents or guardians of fifty children above the fourth grade petition requesting that German be taught, the school board may be compelled by mandamus to make provision for teaching German.—State v. School Dist. of Nebraska City, Neb.

Construction of Statutes.

The county board of education in locating a schoolhouse in a subdistrict will be presumed to have acted in good faith, and any doubt will be resolved in its favor.—Vincent v. Edmondson County Board of Education, Ky.

LEGAL NOTES.

The circuit court of DuPage County, Illinois, in a recent decision, has ordered the county superintendent to pay the Wheaton board of education tuition for country school students attending the Wheaton high school.

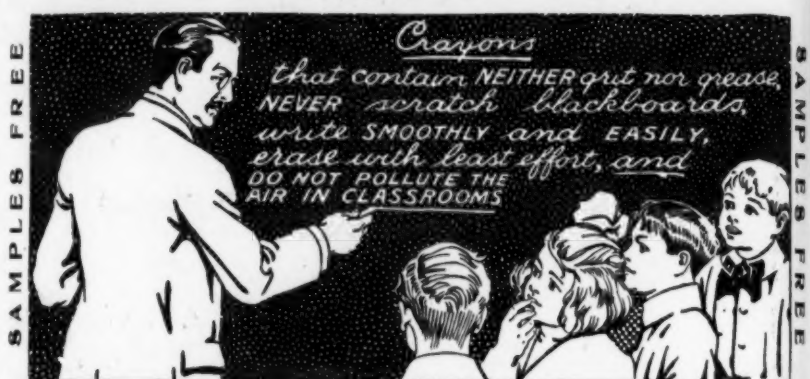
The last legislature passed a law providing that the tuition be paid out of the state school distributive fund, but pending injunction proceedings to restrain payment, no money had been paid out. County Supt. E. C. Pruitt had paid Springfield's share to the board of education, but had asked that it be given back.

A test of the validity of the Illinois high school act has been started in Mercer County circuit court. Suit has been brought by the school boards of Keithsburg, New Boston and Aledo districts to restrain the county superintendent from paying \$6,431 of the \$11,000 distributive fund allotted to Mercer County by the state.

The attack on the law in Mercer county is an index to sentiment which prevails in all parts of the state, especially in the larger towns and cities, and litigation on the question is now pending in several counties. It is claimed that under the new law districts maintaining high schools

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are deprived of large aggregate revenue because of the provision that tuition of pupils from non-high school districts shall first be paid out of the distributive funds.

A victory for Indianapolis, which gives the school board the possession of school property valued at from \$500,000 to \$1,000,000, has resulted since the Indiana supreme court has affirmed the decision of the Hendricks County court in the Technical Institute case.

The following are the points cited by the court: That the Winona Agricultural and Technical Institute and the Winona Institute are each insolvent and are incapable of executing the trust, and that neither has any right, title or interest in the real estate.

That none of the creditors has any claim or lien on the real estate.

That the trust under which the trustees held the real estate has not failed so as to create a resulting trust in favor of the donors, none of whom has any interest in the real estate involved.

That the receiver of the Institute has only such interest in the property as stated and about which no question was raised in the appeal.

That the trustees are entitled to a court order directing them as to the disposition of the trust property.

That the board of education is a proper trustee to execute the trust and is willing and able to do so, and that the trustees shall convey to the school board as trustee the real estate involved.

According to a recent ruling of the Third District court of Salt Lake, Utah, a board of education is not liable under the law for personal injuries.

The ruling was given in the case of John W. Guerts against the Salt Lake Board of Education. Mr. Guerts brought suit to recover \$20,000 damages for personal injuries received while employed as a janitor at the Franklin School. The court held that the board could not be sued outside of contract, that is, to enforce or collect damages for failure to fulfill contract in line with educational purposes.

The Supreme court of Indiana has decided that when state school fund money is improperly distributed and excess amounts are expended by

school subdivisions, other subdivisions cannot recover from those which received an excess.

The Circuit court of St. Louis, Mo., has denied the demurrer of the St. Louis Board of Education to the suit filed by F. C. Kayser and his daughter, Marie E. Kayser, a graduate of the Catholic High School, to compel the Harris Teachers' College to accept her for admission on the same terms as public high school graduates.

Under the rules of the St. Louis board, the Harris Teachers' College accepts without examination those graduates of the city high schools whose grades are among the highest two-thirds of the class. Graduates of other accredited schools in the North Central Association of Colleges and in secondary colleges, are admitted only on examination.

The court held that the Harris Teachers' College was a part of the St. Louis school system which the board had denied in its demurrer. It is also held that, as the board conducts the school, the school comes under the jurisdiction of the board.

Said the court: "The board has the right to make rules and regulations governing admission to the college and limiting admission to those receiving over a certain grade, and to those graduates having a prescribed standing and other qualifications of a general character, but those applying must be given an examination of the same general character and nature covering the work prescribed in the high school."

The suit was brought following the refusal of the board to act favorably on a petition of 38 taxpayers asking that girl graduates of the Catholic High Schools be admitted on an equal footing with public school graduates.

HIGH SCHOOL ADMINISTRATION.

Freeport, Ill. The Steever system of military training will be introduced in the high school next September. Uniforms, equipment and instructor will be furnished by the government.

Philadelphia, Pa. The Subcommittee of the Higher Schools of the board has recommended the rejection of military training in the schools. In its place, the committee recommends that a system of physical training be adopted which will fit boys and girls for their work in life. The

proposed course calls for ten additional directors, additional equipment, marks for proficiency and a reorganization of physical teaching with the instructors prepared to impart the idea to the children.

Madison, Wis. A free summer school will be conducted in the high school.

Champaign, Ill. A complete commercial course has been established in the high school. The commercial work seeks to provide for those who wish to receive business training in connection with the high school course, and also for those who do not expect to remain the full four years.

Rutland, Ill. A commercial course has been added.

Peoria, Ill. The girls of the graduating class were attired in dresses made by themselves. Last year the cost in any instance did not exceed \$2 each.

Chicago, Ill. The school management committee has approved military training for high school students.

Rochester, Minn. The board has introduced the second year of university work at the high school.

Elgin, Ill. Spanish and agriculture have been introduced in the high school.

Canova, S. D. The board has established a twelve-year course in the schools.

Toledo, O. Salesmanship has been introduced in the Waite and Scott High Schools, beginning September first.

A committee of the high school teachers' organizations of Chicago has just completed an investigation of crowded conditions in the high schools. In the report it is shown that there are 3,528 classes of more than 25 members, 2,167 of more than 32, and 885 of more than 40 members. The worst conditions are found in the freshman classes.

Classes in stenography and typewriting have enrollments of 58, 60, 65 and 68 pupils. In another school, some of the classes ranged from 51 to 60 thruout the year.

Chicago, Ill. Figures compiled by Supt. John D. Shoop show that the attendance at the 39 social centers during the past season was 398,308. There were 250,000 boys and 148,290 girls and women who used the buildings.



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ROCKING THE BOAT.

Under the above caption, Mr. William E. Andrews, principal of the Pana (Ill.) Township High School, discusses in the *School News* a phase of the relationship between school board members and superintendents, that is taken too lightly. Mr. Andrews says:

"The delicacy in the adjustment between the internal and external managements of a school is seldom appreciated. The internal administration, officered by the superintendent, and the external directorship by the board of education, must work much upon common ground. Details of co-ordination are not prescribed by local organizations, defined by law, or satisfactorily understood by the officials most involved.

"Fortunate, indeed, is the teacher, or superintendent, whose directors have the good sense to consider as pernicious activity every invasion on their part into the internal management.

"A director can easily grow accustomed to meddling with the official duties and responsibilities of the teacher or superintendent. With no inherent limitations upon the director's activity, it must often result that the official privileges of the head of the internal administration will be trespassed against. This interference by the director may take the form of unpremeditated, careless gossip. Availing himself of the common privileges of talking, things are said that seriously handicap the teacher in his work. Sometimes it is merely the vanity of making an intimate impression upon an assistant teacher, or pupil, or patron, that leads the director to start opprobrious criticism against the head of the school. Sometimes it is merely the envious desire of the meddling director to figure more conspicuously in securing public recognition for some pet policy of internal management.

"It is the easiest thing imaginable for a director to invite, stimulate, and sanction criticism and lawlessness in a school. The most pernicious mischief may be started by a director who, without malevolent intention, eager to keep the conversation going, indulges socially in implied fault-finding. Animated by no motive more sinister than mere conversational amusement, forgetting official position, the director indulges in flippant remark, or personal comment, and the professional standing of the teacher or superintendent is irreparably injured.

"Misguided zeal, indulged in by a director who means well, may imperil a competent administration. It has happened that a 'wise' director privately asked a candidate seeking employment as an assistant teacher how he, the candidate, thought he could get along with the superintendent! Some directors, unmindful of the conse-

quences of starting some things, seek to impose their personal policies of internal management upon the school when they know that the expert who faces all the responsibility has designed the administration upon the opposite plan. It has transpired that inexperienced directors have sought to institute certain activities among the pupils when, if they were informed, they might know that other directors elsewhere were having a battle royal to control the same impossible activities that had been let loose by some irresponsible collegian employed to teach.

"Sometimes a director is quick to recite to the new assistant teacher a garbled account of the careers of those teachers who were retired by reason of their failure. Occasionally a director may seem ambitious to supplant the superintendent by getting in between the superintendent and some of his teachers.

"How like rocking the boat is much of this obstructive activity!

"Few appreciate that the director is free to set up a purely social relation between himself and the assistant teacher, pupils, and patrons. He is not compelled to assume personal responsibility for policies advocated, criticisms indulged in, or jovial comments reeking with injurious criticism of the head of the school. On the other hand the superintendent must maintain the eventful relation of a foreman. He cannot insinuate himself into the good graces of the assistants by playing the walking delegate. He must stand for the serious interests of the school, often against the wishes of some of the assistants, the importunities of insistent parents and the objections of pupils. This consistent supervisory relationship with the teachers, parents and pupils precludes the jovial social code with its irresponsible pleasantries. This situation offers strong inducements to any director whose disposition inclines him to rock the boat to disport himself joyously.

"Fortunate is the teacher, or superintendent, who is always able to administer the school in so competent a manner as to hold the community's approval to so high a degree as to quiet the ambition of any director who would rock the boat."

DR. CRABBE TO COLORADO.

Dr. J. G. Crabbe, former State Superintendent of Public Instruction in Kentucky, and later Superintendent of the Normal School, was recently appointed head of the Colorado State Normal School, Greeley, Colo., to fill the vacancy caused by the death of Dr. Z. X. Snyder.

Dr. Crabbe received his preliminary education in the grade and high school of Sterling, O., the

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degrees of bachelor of arts and master of arts from Ohio Wesleyan University. In 1897 he obtained a degree of master of pedagogy from the State University of Ohio. In 1909 he was honored with a degree of doctor of laws from Berea College and the degree of doctor of pedagogy from Miami University. In 1911 the State University of Kentucky conferred upon him a second degree of doctor of law. He is a member of the Phi Beta Kappa academic fraternity.

"For clear thinking and executive ability," says a letter to H. B. Kepner, chairman of the board of trustees, from a high Kentucky official, "I believe he has no superior. He has made one of the leading normal schools of the country out of a mess of mistakes. He made the best superintendent of schools Kentucky ever had. He is the greatest schoolman in Kentucky."

Mr. N. L. Engelhardt, who resigned in May as superintendent of schools at Dunkirk, N. Y., has become an associate professor in educational administration at Teachers College, Columbia University. In resigning at Dunkirk, Mr. Engelhardt received official letters of thanks from a number of local organizations, particularly from the Polish-Americans, who constitute one-third of the population of Dunkirk.



LEADLESS PAINTS FOR INTERIORS.

That leadless paints should be used for painting buildings or, that, at least, the use of lead in paints should be very much restricted so as to reduce the mortality from lead poisoning among painters, is the conclusion of a Bulletin recently issued by the Bureau of Labor Statistics of the United States Department of Labor.

The bulletin, which is No. 8 of the Industrial Accident and Hygiene Series, is a reprint of an official committee report of the British government and shows that about thirty deaths from lead poisoning occur each year among the house painters of the British Isles, in addition to nearly 750 non-fatal cases of poisoning.

The evidence, which is extensive, indicates that the recently improved leadless paints are quite satisfactory for interior work and that

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to see where mistakes were made, and remedy them before September

What do you know about your heating plant? How much did it cost you, as a member of the School Board, to heat each school building? Were there any complaints among the teachers or janitors as to difficulty in regulating the temperature of the rooms? Why did this building heat easier than that one?

Economy of heat is of vital interest to you, as overheating beyond a certain determined degree is a direct loss, and a waste of fuel.

From the hygienic point of view the close regulation of the temperature of a school building is important; and from an economic point of view it is even more important, as the saving in fuel and labor is 20-30%.

Temperature regulation cannot be safely entrusted to teachers who, absorbed in their work, fail to note a change in temperature until it gets unbearable. Human agencies, through negligence or ignorance, are irregular and cannot be depended upon where it is of vital interest to maintain uniform temperature.

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they have been successfully used on exterior surfaces. Leadless paints, which are claimed to be of sufficient durability for outdoor use, have been found by the British committee to be obtainable in considerable numbers. Individual reports from various firms which have used these paints indicate that they are clean and bright in color and durability, permanent in color, and in general quite satisfactory. The suggestion is made that legislation affecting the amount of lead permissible in paints would give a great impetus to the manufacture of non-poisonous substitutes for white lead.

The committee received much evidence that in the continental countries of Europe leadless paints are coming into favor rapidly because of their non-poisonous quality and because of other advantages which they afford over paints having a base of white lead.

To the American users of paint, the report is quite important, in that the paints which are becoming very popular in the European countries and which are implicitly recommended in this report are of the "flat" and "egg shell" variety, which are now advocated widely for use in schoolroom interiors. The base of most of these paints is lithopone, zinc oxide or other materials which are non-poisonous in character. Some of them have a small quantity of white lead, in no case exceeding five per cent. American manufacturers have developed similar paints which are in many respects superior to the European products, which are permanent in color, bright, washable, and as durable as white lead paints. Quite a number of them have been found more economical in the long run in that they have greater covering qualities.

COMPLETE ADDITION.

An addition to the plant of the Steel Furniture Company in Grand Rapids has been recently occupied by the firm.

The Steel Furniture Company, at the time of its establishment in 1910, occupied a factory in the western part of the city of Grand Rapids. Two and a half years ago the business had grown so that an extension was necessary. A tract of two and one-half acres on South Buchanan Avenue was bought and a factory containing three times the floor space of the first was

erected. The new addition just doubles the space of the plant and will make possible a production of six times the quantity of new steel-standard desks and opera chairs made in the first factory.

SCHOOL COACHES.

The school coach is as much an essential in the development of successful consolidated schools as is the building. Competent experts in rural education realize this and lay much emphasis on the four essentials which satisfactory coaches must possess. These essentials are durability, safety against upsetting, protection against the weather and lightness.

The Marshalltown School Coach is declared by its makers to possess all the qualities of a successful vehicle for conveying school children. The firm originated the vestibule front now demanded by many school authorities. Its four styles of wagons have been approved officially by the Department of Education of Minnesota.

Copies of the newest catalog of the Marshalltown School Coaches may be had upon request by addressing the Marshalltown Buggy Company, Marshalltown, Iowa.

M. & M. GOLD BOND PORTABLE BUILDINGS.

The Mershon & Morley Company has just issued a pamphlet on Gold Bond Ready Built Portable School Buildings that will be valuable in the catalog files of school-board offices.

The pamphlet, in accordance with the progressive business policy of Mershon & Morley, is intended to demonstrate the serviceability of the "Gold Bond" portable houses, and contains complete details of the arrangement and construction. Illustrations of two types of one-room structures and of one type of two-room structures are taken from actual photographs of the houses in use.

Copies of the pamphlet may be had by addressing the Mershon & Morley Company, Saginaw, Mich.

ANNOUNCES EXHIBITION.

Samuel Lewis has announced the opening of new offices and exhibition rooms at 73 Barclay Street, New York.

The firm of Samuel Lewis is the oldest in the United States to devote its entire attention to

the manufacture and sale of janitors' supplies, cleaning materials and institutional furnishings. It was established in 1886 and for many years was located at Five Front Street, near the South Ferry. Its new location is at 73 Barclay Street, not far from the Woolworth Building. The new exhibition rooms are really an educational exhibit in that they contain a most comprehensive display of the most modern types of brushes, cleaning compounds, polishes, scrubbing machinery, etc.

A special invitation has been extended by Mr. Lewis and his associates to school authorities who may come to New York City to visit the display.

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The Victor Talking Machine has become almost as much a necessity in the modern school as the school desk. Whether it be a one-room country school or a large urban high school, the Victor Talking Machine is almost an invariable item in the equipment that is used daily and appreciated thoroly by pupils and teachers.

In introducing the Victor machine to schools, the Victor Company has sought to make it thoroly an educational instrument, and has for this reason prepared a series of several thousand records adapted particularly to school use. The value of this general series may be approximated if just one small fraction—The Historical Section—is mentioned. This historic section has brought together in a form which may be used and enjoyed by every one, significant pieces of music from the days of the Romans and the early Christians down to the epoch making music pieces of the eighteenth and early nineteenth centuries. Other important sections in the series of Victor records for schools are those devoted to folk dancing, songs for teaching, songs for opera and music study, classic selections, physical education, marches and dances.

The Victor school catalog is in reality an encyclopedia of educational music and should be in the hands of every superintendent and principal.

Copies will be sent gratis to any one who will address The Educational Department, Victor Talking Machine Company, Camden, N. J.

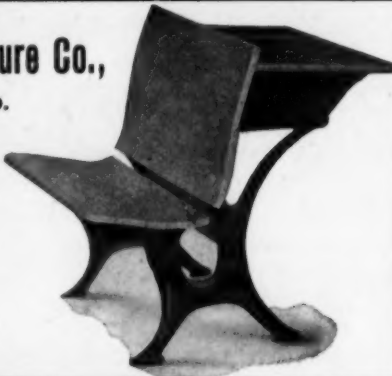
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Delaware	40x58 in.	Hundreds	New York	58x40 in.	Township
Idaho	40x58 in.	County	North Dakota	40x30 in.	Township
Illinois	40x58 in.	Township	Oklahoma	40x30 in.	Township
Indiana	40x58 in.	Township	Ohio	40x58 in.	County
Iowa	58x40 in.	Sectional	Pennsylvania	58x40 in.	Township
Kansas	58x40 in.	Sectional	South Dakota	58x40 in.	Township
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NEW WESTERN ELECTRIC EXECUTIVE OFFICES.

The executive department of the Western Electric Company, Incorporated, at New York moved on June 5th from 463 West Street to new offices in the Telephone and Telegraph Building at 195 Broadway.

The move was made necessary by the steady growth of the company's engineering departments which will occupy the space that has been vacated. The change also brings the executive departments in closer touch with the heart of New York's business district.

The local New York distributing department and the engineering and patent departments remain at 463 West Street.

NEW CATALOG OF LEONARD PETERSON & CO.

Leonard Peterson & Company have just issued their special catalog No. 8 of complete equipment for domestic science departments.

The catalog contains a variety of styles in students' domestic science tables, supply tables, dining tables and chairs, especially designed stoves for domestic science use, gas and electric ranges, selected utensils for the domestic science laboratory and also practical designs of furniture for the sewing room including students' sewing tables, instructors' tables and cases of all kinds. The latter part of the catalog is devoted to a number of students' and instructors' manual training benches, tools of all kinds and a student's chemistry and physics table.

Copies of the catalog will be sent to school authorities or others who may be interested by addressing Leonard Peterson & Company, 1234-48 Fullerton Ave., Chicago, Ill.

NEW FRICK PAMPHLET.

A new booklet on the Frick Electric Time and Program Clock System has been issued by the Landis Engineering & Mfg. Company, Waynesboro, Pa.

The Frick System which consists of a Master Regulator, any number of Secondary Clocks con-

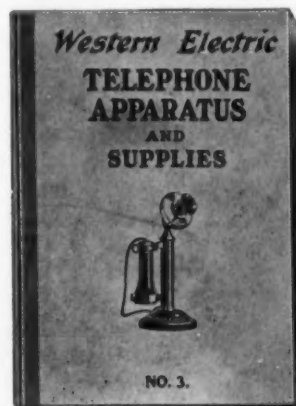
trolled by the Master Regulator, a Program Machine for ringing bells according to a definite schedule, and battery for operation of the entire system is fully described in the pamphlet. A special blank for outlining program requirements is included for the benefit of architects and school authorities.

Copies of the pamphlet may be had by addressing the Landis Engineering & Mfg. Company, Waynesboro, Pa.

A TELEPHONE CATALOG.

A new and unusually complete catalog of telephone apparatus and supplies has just been issued by the Western Electric Company.

The catalog contains complete descriptions, circuit diagrams and directions for use which enables the buyer of central office and subscriber



station apparatus to select exactly what he needs. Miniature reproductions of sales helps and lists of everything needed by telephone companies for the inside and outside plant such as telephones, switch-boards, power plants, cable, line construction tools, line construction materials and miscellaneous apparatus will be found in this catalog.

Copies will be sent to those who may be interested by addressing the Western Electric Company, New York City.

TWO NEW JOHNSON PAMPHLETS.

A pamphlet describing and illustrating electric thermostats, electric heater controllers, humidistats and other electric controlling devices has recently been issued by The Johnson Service Company, Milwaukee.

A second pamphlet has been issued by the firm describing the various Johnson heating and heat controlling specialties. The latter include hot water tank controllers and thermostats designed for various laboratory and industrial purposes.

Copies of both pamphlets will be sent upon application to any school authority.

A TEACHERS' BENEFIT COMPANY.

For a number of years there have been in existence, throughout this country, mutual benefit or accident insurance societies and firms designed to protect citizens in general against loss of pay thru illness, accident or death, and to protect the family when the wage-earner is incapacitated. Employees of railroads and manufacturing plants are members of benefit societies which are organized to give adequate protection to the family of the employee. Up to a few years ago this protection was not given to teachers.

To Nebraska has been accorded the honor of being the home of an institution organized to help teachers out of work and under medical or surgical care. The Teachers' Casualty Company was founded a few years ago by E. C. Folsom and Wm. Ritchie, Jr., at Lincoln. The company, which is nation-wide in scope, urges upon teachers the necessity of providing against the time when their salaries will be stopped thru illness, accident or quarantine.

The Teachers' Casualty Company has established a reputation thru its prompt and business-like methods in the payment of claims on policies held by teachers. Just recently the company paid promptly a death claim of \$2,000 to the widow of a school teacher in the state of Nebraska.

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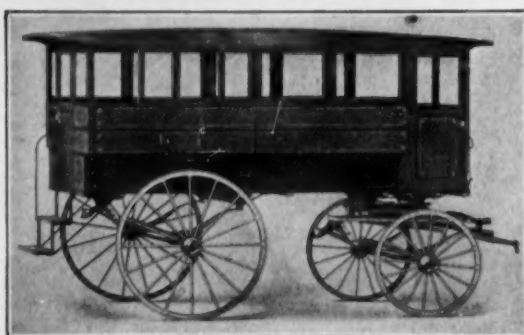
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TENURE OF OFFICE ABOLISHED.

The Chicago Board of Education, on June 14th, passed a rule making one year the tenure of office of a school teacher. In effect, the rule discontinues a former policy thru which teachers held their positions permanently so long as they were rated efficient by principal and district superintendent. The new rule allows the board to remove inefficient teachers.

It is alleged that the new rule will be used against the Teachers' Federation to remove those instructors who have incurred the displeasure or enmity of the board. The rule is opposed by Mrs. W. Gallagher, Mrs. J. MacMahon, Dr. P. C. Clemenson and Max Loeb of the board and by Miss Margaret Haley and Miss McDowell of the Teachers' Federation.

While it is generally considered by those interested in preventing the passage of the rule that the Teachers' Federation is the objective, no mention of the federation is made. Mr. J. W. Eckhart, one of the members, declared that, so far as he knew, the rule was aimed at no particular group. Mr. R. O. Otis, another member, is of the opinion that there will be a state of demoralization in the school system. Mr. Otis makes the plea that teachers be notified of dismissal.

The following are the opinions of other members on the rule:

"I am in terror for those teachers who have incurred the enmity of any member of the board. I beg of you who are in favor of the rule to stand up and tell me who now will mark the inefficient, how will they be marked, and who is to furnish the list of those to be dropped."—Mrs. MacMahon.

"I have heard the same storm of protest whenever the board has sought to change its rules. I have heard that same bark by people who have nothing else to do, and if it does not stop it will ruin the schools. This rule will only put all of the teachers on an equal footing."—Dr. Clemenson.

A SURVEY OF KANSAS SCHOOLS.

A survey of 35 Kansas cities has been begun by Dr. F. J. Kelly of the University of Kansas.

to make possible the adoption of standards for the age and grade distribution of pupils, experience and salaries of teachers, cost of education, and grading of pupils' classwork. The data will be printed and issued in the form of a report during the next year by the Department of Education.

The first part of the survey seeks data on the age and distribution of children. Each child will be listed according to age and class, and special attention is given to backward pupils.

The second covers salaries, training and experience of teachers. The salaries' column shows the comparative earning value of teaching experience compared with education, and the total average for teachers in the grades and high school.

The third item is that of finances. Data is gathered on the amount of money spent on the schools, the method of obtaining money, and what per cent is spent for salaries.

The fourth item is that of ratings for children's school work. Each teacher turns in the grades of her pupils in the different studies and a summary is made of the whole.

The material obtained will not only assist in standardizing these facts, but will assist the teachers, principals and superintendent in knowing actual conditions. Teachers will be able to see how their grades compare with other cities in the state.

SCHOOL ADMINISTRATION.

Joliet, Ill. The board has amended its rule governing the entrance of applicants to the teaching ranks of the public schools. The present rule, which considerably strengthens the standard of qualifications, provides that the minimum educational requirement for appointment shall be one year of recognized normal or college training beyond graduation, from a standard four-year high school course or its equivalent. The rule may not be taken as a hardship by prospective teachers because a year's work beyond the high school is offered in the Joliet training school, without expense. It is also provided that, hereafter, the examination for teach-

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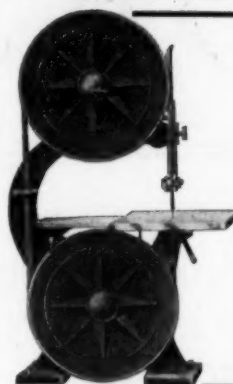
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ing positions will be given only to those who have had at least one year and less than two years of professional training.

According to State Supt. C. P. Cary of Wisconsin, only four per cent of Wisconsin teachers, excluding those working in the cities, teach six years or over. In the rural schools, only thirty per cent of the total number of teachers have taught one year or less; 65 per cent, or over twice as many, have taught in the local district one year or less. The figures reveal the fact that there is an enormous amount of changing positions in the rural schools, and in the high schools the showing is even worse. Of a total of 1,038 high school teachers, 471, or 40 per cent, have one year or less experience in the locality; 277, or 27 per cent, two years; 118, or 11 per cent, three years; 65, or 6 per cent, four years; 35, or 3 per cent, five years, and 72, or 7 per cent, six years or over.

Springfield, Ill. The local teachers have been invited to join the American Federation of School Teachers and become affiliated with the organized labor body. It is planned to organize a branch council which shall be a part of the national body.

TRANSITION TO THE COUNTY UNIT PLAN OF SCHOOL CONTROL.

(Concluded from Page 21)

be admitted. Even so, why not get the best thing at once, since the same exertion and enterprise that would get the intermediate will secure the final and more desirable goal?

I imagine readers asking, "What results can you show?" I am in the plight of the Irishman, after the train had run over him, when advised to bring suit and to get big damages, replied, "Begorra! I'm damaged enough already." There are results, negative, of course, but I have them in abundance. Out of this abundance I am making this proffer of help to others, so that the experience may be passed around.

TO EVERY SCHOOL BOARD IN THE COUNTRY:

While we realize that you are aware of the present unsettled market conditions, we feel it our duty to call your attention again to the following facts.

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RECENT PUBLICATIONS.

Comparative Statement of Expenditures for Maintenance of State Normal and Training Schools, December, 1914, to November, 1915. Prepared by Mr. E. C. Baldwin, Boston, Mass. The material consists of a series of tables and graphs giving the average membership, cubic content, area of grounds, appropriation, expenditure, cost per student, receipts and net cost per student, also the summaries for the cities of Bridgewater, Fitchburg, Framingham, Hyannis, Lowell, North Adams, Salem, Westfield and Worcester. Additional tables give the salaries, wages and labor for normal schools, training schools and for general administration; cost for furnishings, heat, light and power; repairs and improvements, and grounds; supplies for normal schools, training schools, offices and other purposes, and miscellaneous expenditures.

Secretary's Report—1914-15. The General Education Board, New York City.

Advancement of the Teacher with the Class. Bulletin No. 42, 1915. United States Bureau of Education, Washington, D. C. By James Mahoney, Special Collaborator for the Bureau. The pamphlet discusses the question: Shall teachers in city graded schools be advanced from grade to grade with their pupils, or shall they remain year after year in the same grade, while their children are taught by a different teacher each year?

Report of the Warren School Committee, Warren, Mass., 1915. The report contains a reference to the reorganization of the school system and the proposed establishment of a Junior High School.

Thirty-second Annual Report of the School Committee, Northampton, Mass., 1915. The report of the superintendent gives a list of the changes and improvements put into execution during the past year, and calls attention to eight recommendations which were especially requested in 1913 and 1914.

Education Bulletin, State of New Jersey. Amendments and supplements to school law, together with related laws, Vol. II, No. 9, 1916. The pamphlet quotes the laws relating to the establishment of public school systems and their support and maintenance; savings among the

school children of New Jersey; military training in high schools; regulations governing the safety, health and working hours of persons employed in factories, workshops, mills and all manufacturing plants where goods of any kind are made; regulations for the reading of the Bible in schools.

Rural Schools. Reprint from the Seventy-ninth annual report of the Massachusetts Board of Education. The pamphlet discusses Present Practices in Rural School Administration, Improvement of School Administration, Rural School Buildings and State Course of Study.

The Improvement of Educational Administration in Massachusetts. By David Snedden, Commissioner of Education. Reprint from the seventy-ninth annual report of the Massachusetts Board of Education. The pamphlet discusses The Improvement of Educational Administration in Massachusetts, Intermediate Schools, Secondary Schools, Vocational Education, Kindergarten and Subprimary Classes, State Aid for Higher Technical Education, The Massachusetts Normal Art School, University Extension and Correspondence Teaching, Education of Delinquents, Education of Mental and Physical Defectives, Training of Teachers for Normal Schools, Certification of Teachers, After-Training of Teachers, Compulsory School Attendance, Medical Inspection of Schools, Supervision Plans for School Buildings, Scientific Methods in Educational Administration, Principles of Administrative Organization and Financial Aid from the State.

Kansas City, Missouri, Public Schools. Bulletin No. 1, Bureau of Research and Efficiency, February, 1916. The pamphlet discusses Measuring School Achievements, Accurate Copying and School Achievement, School Progress Study, School Maintenance Studies, and Cost of Coal per Pupil in Daily Attendance.

Atlantic City Public School Bulletin, March, 1916. Printed by the Vocational School Press, Atlantic City. This pamphlet discusses the buildings, bonded indebtedness for school purposes, enrollment, attendance abstract, cost of maintaining and operating the school system, summer school, evening school, rapidly moving classes, medical inspection, special classes, charity and relief work, school savings bank and teachers.

School Report, Burlington, Vt., 1914-15. Forty-seventh annual report of the public schools, July, 1915. M. D. Chittenden, Supt.

Problems Involved in Standardizing State Normal Schools. Bulletin No. 12, 1916, United States Bureau of Education. By Charles H. Judd and Samuel C. Parker. The pamphlet discusses the scope of the bulletin, statistical comparison of colleges and normal schools, the purpose, number and geographical distribution of services of state normal schools, administrative control of state normal schools, practice-teaching facilities, faculties of state normal schools, general courses of study for high-school graduates, organization of practice teaching, training of rural teachers, training of high school teachers and conferring of degrees, training of teachers of special subjects, and program for development of normal-school standards.

The Problem of Home Work. A report by the Committee on School Administration. Edward W. Stitt, Chairman of Committee. The pamphlet goes into the reasons for and against home work, habits in home work, school facilities in home work, credit for home work, checking home work. The report, which was based upon a comprehensive questionnaire prepared by the committee, was circulated thru the courtesy and co-operation of the various members of the New York Academy. The results of the investigation include the judgment and experience of over two thousand members of the teaching profession.

Grand Junction, Colo. The board has adopted a number of changes in the direction of economy. The estimated saving to the school system is about \$9,070 per year. Among the changes are the abolishment of the kindergarten department, the elimination of the Batavia system, the elimination of penmanship supervision, a reduction of the school term from nine and one-half to nine months, the elimination of teachers' visiting days and the establishment of an ungraded room.

Buffalo, N. Y. The board is considering the adoption of the unit plan of building for all future structures. It is planned to have the buildings either of the eight, sixteen or 24-room type, all with provisions for additions as the needs of the school demand.

BEST BOOKS ON SPANISH

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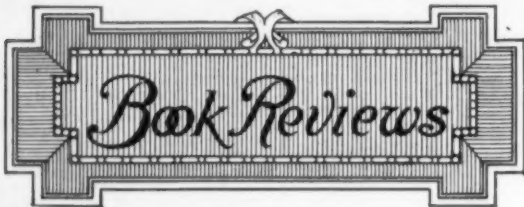
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Agricola and Germania. By J. H. Sleeman. Cloth, 211 pages. Price, \$0.75. Published by G. P. Putnam's Sons, New York.

A scholarly edition for college use. The editor has culled, from the many special discussions of these volumes, a book of most plausible and usable facts and explanations. While the book is intended for college classes, it avoids the voluminousness of the older editions and the minuteness of detail which the German and French commentators are guilty of.

Essentials of Geography.

By Albert P. Brigham and Chas. T. McFarlane. Book I. Cloth, quarto, 266 pages. Price, \$0.72. The American Book Co., Chicago, Cincinnati, New York.

As the first series of new geographies which has been issued by an important American publishing house, these books are of more than usual interest.

The books fulfill splendidly the aim to meet the need of accurate information about the new industrial and commercial conditions of today. They emphasize constantly the connection between geography and the everyday world which the pupil knows. Under this pedagogically correct treatment, geography becomes the interesting and definitely practical subject it should be. Instead of the too-customary pedantic style or the condescending style, the manner of expression is simple, free and graphic—a journalistic style of the best type. The pupil who studies these books cannot help realizing the great usefulness of a knowledge of geography in the work-a-day world he expects to enter.

The authors have made use of the standardized government divisions of the country state groups and the maps show these groups. The maps throughout are new, unusually clear and accurate. They are supplied with complete keys so that nothing is left to conjecture and map study is simplified.

Instead of making physical geography a formal and separate subject, these books constantly show its interrelation with the work and life of the world. Agriculture is adequately treated as

the basal industry of human life, and a thorough explanation is given of underlying physical conditions. The effect of mountains, plains, valleys, lakes, rivers, and harbors on such industries as lumbering, grazing, farming, fishing and manufacturing is made clear; the pupil learns how these natural features have largely shaped transportation routes.

The illustrations of the books deserve commendation not only for their variety and completeness, but especially for their newness and freshness and the total absence of old, formal plates so familiar in older geographical series. It would be difficult to collect more interesting or typical illustrations.

The books typify the best modern geographical pedagogy and can be heartily commended.

Elementary Geography.

By Harmon B. Niver. Cloth, 368 pages. List price, 75 cents. Hinds, Noble & Eldredge, New York City.

Fullness in the text, many maps, graphs, illustrations have made this elementary geography a large, heavy book. It is claimed by the author that parts not adapted to particular sections or particular classes of pupils may be easily omitted.

Among the distinctive features are the maps. They are consistently drawn on three scales. One scale is used for all maps of continents; a second, for maps of the larger countries; a third, for groups of states. An idea of relative size is thus given. Relief maps are excellent. Graphs tell a varied story. Distribution of population, relative production in different areas, of grains, animals, minerals are shown in these graphs. While not all the illustrations are good, all are instructive. Tables of statistics in the appendix tell a deal. Naturally and rightly more space is given to the United States than to any other country. It is the home land. Maps and map questions are placed by themselves in the latter part of the book. This arrangement and the size of the book seem, to a casual observer, the main drawbacks.

Real Stories From Our History.

By John T. Faris. 12mo, Cloth, 308 pages; illustrated. Price, 60 cents. Ginn & Company, Boston.

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The Young and Field Literary Readers.

Book Two. By Ella Flagg Young and Walter Taylor Field. 208 pages. Price, 40 cents. Ginn & Company, Boston.

Fables, legends, and children's poems go to make up Book Two of the Young and Field Literary Readers. There are groups of fables from Russia, Hindostan, Greece. The each fable expresses the wisdom of many and the wit of one, it has also the coloring of the country in which it took form. This same idea holds good for the legends and the folk tales. Those of the American Indians show their sense of poetic justice and their reverence for the Great Spirit. Men and women of the present have given exquisite bits of poetry, just exactly right for children.

The book will give lasting enjoyment to its readers.

The Mexican Twins.

By Lucy Fitch Perkins. 184 pages. Price, 50 cents, net. Houghton Mifflin Company, Boston, New York and Chicago.

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We meet them on the morning of San Ramon's day, when fowls and animals are brought to be sprinkled with holy water and blessed by a good priest. Later, Tonio—like some of his elders—does what he had no business to do, meets his just deserts and has altogether a bad day. Then Tonio and Tita are sent up the mountain side to gather wood, where they get lost, sleep outdoors, aren't hurt a particle. We leave them on Christmas day, glad over high mass at midnight, more glad over their Christmas dinner and the return in the evening of their father from service in a revolutionary army. Thus home life, church services, unsettled political conditions have their turn.

The author has told her story in words and in illustrations in black and white. It is really hard to decide which way tells more.

(Continued on Page 86)

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(Concluded from Page 84)

Health and Safety.

Gulick Hygiene Series. By Frances Gulick Jewett. 197 pages. Price, 40 cents. Ginn & Company, Boston.

The pages of this small volume discuss the care of the eyes, the ears, the hair, the finger nails, the teeth, the skin, also habits of eating, sleeping, exercising. Only praise can be given to the way in which each one of these topics is handled. The style is clear and pleasing, the illustrations are apt, the conclusions are pointed. These last are numbered and so placed on the page that eye and mind can hardly fail to notice and remember them. The numerous pictures supplement the text. Questions at the end of each chapter emphasize every point previously made.

The chapter upon emergencies and accidents is timely. Quite young boys and girls will care for an accident with promptness and precision, if they have had good training. The entire book drives home the conclusion that proper care gives health as a result.

The Story of the Gallic War.

By J. Remsen Bishop and T. T. Jones. 452 pages. Lyons & Carnahan, Chicago and New York.

In addition to the first four books of Caesar's Gallic War with notes and vocabulary, students will find selections from books 5, 6 and 7, selections from the lives of Nepos, a chapter on paradigms, a chapter on Latin prose composition.

The composition of a legion, the rank and duties of its officers are well explained in the introduction. Here, too, cuts of weapons, war engines, military formations are found, making the introduction a serviceable reference chapter on military technicalities. Maps are in evidence. A map of Gaul in Caesar's time is followed by maps of campaigns against different Gallic tribes, maps of besieged towns, of important battles.

An individual feature is paraphrases of the text, appearing at intervals thruout the first four books. Their purpose is to give the student a general idea of the story before attacking the text. It has often seemed to the writer that of the members of a class—under a teacher who understood and loved the strong Roman tongue—would critically study and memorize Caesar's vocabulary and constructions thru the first half

of Book One they might then read with some fluency the remaining books, just for the fun of the thing. However, the same results may probably be gained by a more rapid reading of a greater quantity. It is only due the authors to mention that the selections from books 5, 6, 7 are designed for sight reading.

On the dark green cover is the profile of a helmeted warrior. Other wood cuts add value to the war records of a Roman who wrote in the same spirit in which he fought.

Little Lives of Great Men—Washington: A Virginia Cavalier.

By William H. Mace. Cloth, 180 pages. Price, 35 cents. Rand, McNally & Company, Chicago and New York.

Boys and girls of the fifth and sixth grades are hero worshippers. The success of others raises their standards. It is hoped these "Little Lives of Great Men" will interest their minds and stir their hearts.

This author has been happy in his pictures of 18th century home life in Virginia. His skillful use of little incidents make us see Washington as a boy and a man, loved by his companions, his neighbors and later by his countrymen. The point of view is the human side.

Old and young will find inspiring reading in the pages of this little book.

Arithmetic by Practice.

Six books.

Third year-First Half to and including Fifth Year-Second Half. By Arthur T. Gorton, Leslie O. Lynch and Rupert H. Murray. Parker P. Simmons Company, New York.

A principal and two department teachers in the public schools of New York City have worked out this series for the third, fourth, fifth years. It is published in two forms: a six book edition, one book for each half year's work; and also a three book edition, one book for each year's work.

The authors have made these points prominent; a thoro knowledge of fundamental processes, a thoro memorizing of tables and ordinary factors, simple and concise processes, immediate application of each new point, continual reviews. In every lesson oral work precedes written work. An example or examples, carefully

worked out and explained, introduces each new point and is called a type lesson. Rapid drills are frequent. Four lessons followed by a review lesson; a week of review work every four weeks, forms the general arrangement. This arrangement shows how much stress is laid upon frequent and regular reviews. The conditions in the examples are those of everyday life and, like the frequent reviews, tend to cultivate accuracy and speed.

A good quality of paper, clear type, good grouping of work are noticeable. Answers to examples are given at the end of each book. In this particular this series does not differ from many other series, but why not put each answer directly after each example? It would be convenient and time-saving. Not a diagram is given. Perhaps this form of explanation is left to the judgment of teachers. To them also seems to be given the duty of explaining more fully the terms and concise definitions. The watchword of this series is certainly that of its title, "Arithmetic by Practice."

Yiddish-English Lessons.

I. Edwin Goldwasser and Joseph Jablonower. New York. Cloth, 248 pages. D. C. Heath & Co., Boston, New York.

A district superintendent and the principal of an evening school—both men of many year's experience in teaching English to Jewish immigrants—have collaborated in preparing this reader. The authors have taken into account the life and experiences of the users of the book, and have adapted the vocabulary methods and general subject matter to their new interests, work and environment. American institutions, laws and customs are very strongly emphasized and much valuable information on naturalization, and civics, is given. The book is very practical.

Pitman's Commercial Spanish Grammar.

By C. A. Toledano. Cloth, 246 pages. Price, \$1. Isaac Pitman & Sons, New York.

This volume is a reprint of the successful commercial Spanish grammar first issued in 1911. A few necessary corrections and changes, dictated by classroom use, have been made. The book has become a favorite text by true merit.

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TEXTBOOK NEWS.

New Orleans, La. The following books have been adopted by the school board for use in September: Aldine Language Books and English Lessons (Silver-Burdett); Natural Method Series of readers; Preparing for Citizenship (Houghton-Mifflin); Community Hygiene (Macmillan); Evans's Essential Facts of American History (Sanborn); Riggs's History (Macmillan); Smith Series in Music (American Book Co.); Lister Muscular Method of Penmanship (Macmillan).

A recent report of State Printer W. R. Smith of Kansas, shows the number of copies of each book printed, the cost, the selling price, the profit, and the old selling price before the state went into the publishing business.

The report shows that to date, 87,744 histories have been printed. The book sells for \$0.21, a saving of \$0.45 over the former selling price. The cost for the first edition of 37,207 copies was 24.2 cents each, including the manuscript cost of cuts and plates. The third edition cost 10.3 cents each for the 25,000 copies printed.

The first edition of the text on agriculture, of which 28,619 copies were printed, cost 21.2 cents each, including the cost of the cuts and plates. The second edition of 30,000 copies was printed at a cost of seventeen cents. The present selling price of the book is thirty cents each, while the old selling price ranged from \$1 to \$1.75 each.

Of the first edition of seventh-grade classics, of which 25,107 copies were printed, the state broke even, the cost reaching seventeen cents. The cost of the second and third editions has been cut down below thirteen cents, the third edition of 24,949 copies costing only 12.22 cents each. The second edition of 10,000 copies cost 12.86 cents each. The first edition of eighth-grade classics was a financial loss. There were 24,949 copies printed at a cost of 18.1 cents, each selling at seventeen cents. On the second edition of 15,200 copies, the cost was reduced to 14.74 cents each and on the third edition the cost came down to 12.4 cents. The privately published classics sold for from fifty to sixty cents each.

Wooster's primary arithmetics are selling at fourteen cents each to dealers. The printing price is seven and one-half cents each, including

commission costs, and the royalty is two cents a copy. The price under the private publisher, was twenty-five cents.

Gordy's histories cost the state eighteen cents for printing, and thirteen cents for royalties. The same book which formerly retailed at sixty cents.

Geometries cost the state 48 cents to print. They are sold to dealers for sixty-one cents. The same book which formerly retailed at \$1.10, now costs seventy cents.

New Orleans, La. The board has adopted Riggs's American History and Gill's The South in Prose and Poetry for use in the schools. The Natural History Method of Readers have been adopted as basal texts. Harris & Gilbert's course in English has been adopted to replace a former text.

At a typewriting contest held in New York City, on May 6, Miss Rose L. Fritz made a new record for absolute accuracy, writing 118 words a minute for fifteen consecutive minutes. The best previous record was 69 words per minute for absolute accuracy. Miss Fritz learned typewriting under the supervision of Charles E. Smith, author of Smith's Practical Course in Touch Typewriting.

The initial hearing on the question of state uniformity of California high school texts was held on May 15th at San Francisco, before the Joint Legislative Committee on High School Textbooks. During the discussions the plan was commended by the typographical union and just as bitterly opposed by the leading high school teachers of the state.

George A. Tracy, a representative of the Typographical Union, argued for a state series of high school books, printed at the state office. His position was augmented by a brief presented by W. E. Pitschke of Oakland, which was prepared at the suggestion of the typographical unions of San Francisco, Los Angeles and Sacramento, and by the state printer.

The opposition included E. M. Cox of Fremont High, Oakland; L. B. Avery, Assistant Superintendent, Oakland; G. W. Wright, Centerville; W. A. Tenney, Vocational High, Oakland; P. M. Fisher, Technical High, Oakland; W. C. Wood, State Commissioner of Secondary Education.

RECENT OFFICIAL PUBLICATIONS.

The Junior-Senior High School, Lewiston, Ida. Bulletin prepared by Supt. G. W. Simonds. An outline of the organization and course of study of the six-three-and-three organization of the Lewiston schools.

Nebraska Educational Bulletin. Vol. I, No. 2, May, 1916. Consolidation Number. Published by the Nebraska State Department of Education, Lincoln. It is the aim of the Nebraska Educational Department to make the schools fit in a large measure the needs of an agricultural state. It is not urged that all the children remain on the farm, but it is desirable that all shall realize the opportunity of agricultural pursuits before giving them up in favor of more uncertain callings. The rural high school has been established to improve the work of the grades, to give the children the advantage of home life while attending school, and to help them during their secondary education so that they will be able to choose their life work with less prejudice and greater intelligence. The pamphlet discusses the one-room rural school, the present crying need of the rural school, consolidation as practiced in other states, a summary of the consolidation plan in Nebraska and its cost to the school districts.

A School and Community Survey and Community Welfare Week is the title of a pamphlet just issued by the University of Utah. The pamphlet, which contains 32 pages, is intended for the use of persons engaged in school and community work and in the activities of community welfare week. It discusses The Need of Community Education and The Community Survey, Community Organization, Organization of a League, and gives an Outline for a Community Survey Program.

Annual Report of the School Department, Newton, Mass., 1915. U. G. Wheeler, Supt. The report of the superintendent takes up the problem of schoolroom accommodations, the advantages and disadvantages of having school building and repairs in charge of the city building department, the cost of repairs and the cost of buildings.

Annual Report of the School Committee, Attleboro, Mass., 1915.



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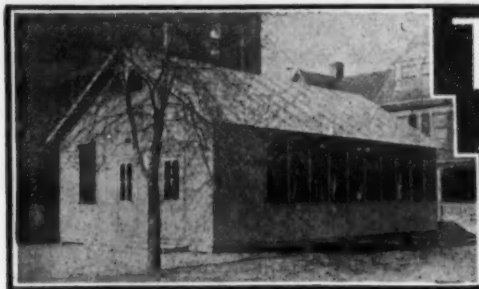
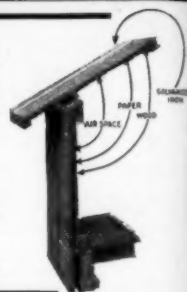
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THE CONTENT AND ARRANGEMENT OF THE SUPERINTENDENT'S REPORT TO THE SCHOOL BOARD OF A LARGE TOWN OR SMALL CITY.

(Continued from Page 27)

point of length was from two pages to 54 pages. Six of the reports had ten pages or less.

The practice of including minor reports. There is much divergence among superintendents as to whether the report of the paid officials to the school board shall be a co-operative affair or whether the superintendent shall be the single medium thru which information passes to and from the board. One report examined included eight separate reports. The most customary practice was for a superintendent to include three reports in his own.

Miscellaneous Features. One report was a

combination of committee's and superintendent's report. One included the full text of "the revised laws of school legislation." Six reports gave little evidence of any consistent plan in their construction.

Taking these eleven school reports as a basis of judgment it appears safe to assert that there is at present no satisfactory or common practice among superintendents in the construction of their annual report. Such a practice is necessary, if annual reports are to be read and compared with clearness and economy of time.

I pass now to the consideration of a type form for superintendents' reports. If all reports were written in the manner suggested below I believe the prevailing confusion would disappear. In constructing this type form several important factors have been kept in mind.

A. A superintendent's report should by direct and indirect influence stand for the sound principles of administration. One of these principles is that the respective duties, functions and rights of the committee and superintendent be kept clear and distinct. Thus their reports should be distinct and separate. Such is not always the case. The combined report should be absolutely given up.

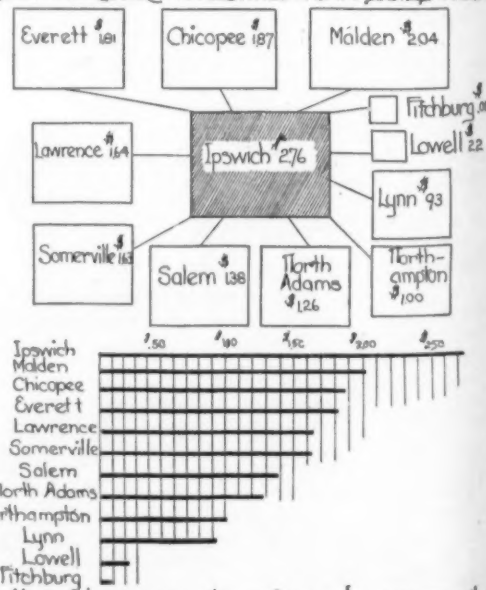
B. The superintendent's report should contain only vital and pertinent statistics. It is not a scrap book in which interesting events of the past should be kept, it is not primarily a historical document. It bears to the policy of the schools a relation similar to the relation the president's message to Congress, bears to national legislation. Hence mere statistics such as the programs of graduation exercises, courses of study, the details of the ear-and-eye tests should be excluded from the report. The following assertion is the test by which any statistics should be admitted or excluded from the superintendent's report: No statistics should be printed unless they have direct and evident bearing upon the present condition of the schools, or unless they can be used as a basis upon which the school committee can shape its policy or legislation.

C. In the writing of the superintendent's report every effort should be expended to make it readable, dependable and influential. Effective methods of presentation such as charts, diagrams, recapitulations should be skillfully used.

D. Every report should contain a carefully prepared index. It is simply a labor-saving device and a courtesy to which the reader is entitled.

E. The main body of the report should be a thoughtful and germane discussion of educational policy as applied to the present situation and the needs of the coming year. The superintendent is supposedly the educational expert of the community. He should therefore be one of the leaders in directing and in working out the development of the schools. His annual report should include a workable program for the coming year. Hence changes, improvements and extensions needed should be fully discussed by him. Once each year the superintendent should hand to his committee the product of his year's thought and meditation upon the problems of the schools.

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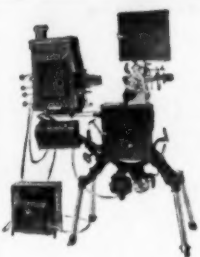
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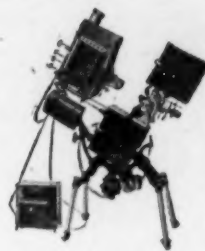
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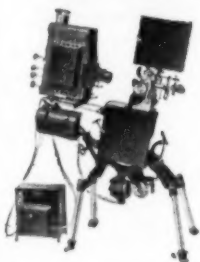
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F. Second to no other part of his report in importance should be the superintendent's estimate of the funds needed for the coming year. His report should include a carefully prepared and fully itemized budget. He knows the needs of the schools and the cost of meeting these needs. Hence he should forecast the cost with dependable accuracy.

These principles should be kept in mind in drawing up a type form of report. It should be distinct from the committee's report, it should include only pertinent statistics. It should aim at effectiveness, it should contain an index. The main body of the report should deal with policy and recommendation. It should furnish an accurate budget for the coming year.

The outline of the superintendent's report should be divided into three parts. The first part should be given to general introductory matter. Here matters of general interest can be noted, the organization of the department explained and events within the schools of historic significance given due notice. New laws which need to be made known to the public may here find a place.

The second division of the report and the main body of it contains three distinct features: First, a plain statement of the distinctive features of the past year's work; second, a discussion of educational policy with well organized recommendations for the coming year; third, a proposed budget, commensurate to the needs of the schools and accurate in detail.

The third division should be given over to pertinent and vital statistics. Among these statistics will usually be found the financial report best in the form of a balance sheet: The age and grade of pupils in the schools, the cost of instruction per pupil in the several grades, the

number of pupils per teacher. There will often be included comparisons of certain phases of the school work with similar phases of other communities. This, however, should not be done unless it specifically advances some argument in the main body of the report.

In any one of the three divisions suggested above it will often be expedient to leave out some of the material mentioned and add matter not specifically mentioned here as local circumstances may require. The general form and outline, the sequence of topics and the main divisions as suggested should be preserved. The following outline in conclusion presents the type form of superintendents' reports in another way.

Pasadena, Cal. Beginning September first, the Muir School will be organized as an intermediate school, accommodating the pupils of the seventh, eighth and ninth grades.

Los Angeles, Cal. The board has adopted a rule prohibiting fantastic dancing in abbreviated costumes. The rule exempts folk and gymnastic dances, costumes for portraying the character of the dance, and old dances which have the approval of the board.

Freeport, Ill. The board has fixed the tuition rates for the high school at \$65 and for the grades at \$30.

Los Angeles, Cal. The Board has adopted a rule prohibiting high schools from sending athletic teams outside Southern California for any contest. The enforcement of the rule, in the case of the Manual Arts High School, has been vigorously protested by the students.

The Erie, Pa., Board of School Directors has established a Teachers' Retirement Fund. The school district and the teachers are equal contributors. Membership by present teachers is optional but compulsory for all future appointees. The system has been devised by Mr. Walter I. Hamilton of the Massachusetts State Board of Education.

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SOME DEFECTS OF PUBLIC SCHOOL ADMINISTRATION.

(Continued from Page 26)

This friction may arise from confusion of function on the part of both types of officials, with resulting infringement of mutual rights and powers; it may arise from the lack of trained business sense of both, which added to conflict or duplication of efforts, results in poor planning and feeble execution all around. The lack of harmony does not as a rule develop from noticeable weaknesses of character or ability of either type of official. The institution or relation of lay control over expert execution is a fixture of our form of democratic government. Federal or statute legislation would produce friction. Other forces must be sought for and developed.

Fourth. When school boards learn the wisdom of recognizing and marking off for themselves their proper administrative functions, and delegate to their executive agents adequate and distinct powers for the accomplishment of measurable constructive educational results, a long step forward toward the promotion of official harmony between boards and their superintendents of schools will have been taken. This end will be approximated when board members grasp the essential truth that it is both high minded and keen-minded to grant ample power to the school superintendents, thereby giving prestige to the work of education and to all the workers connected officially with it.

The prestige which a school board can give to a superintendent's work and office by its strong support when he is involved in difficult situations enables him to be recognized as an integral part of the business mechanism of the community.

The average tenure of office of school superintendents in the United States is four years, varying from two years in the extreme western part of the country, to six or seven years in the eastern part.

For the money and time involved in preparation for this important profession, for the tremendous power given into the hands of school superintendents, and for the far-reaching effects of the exercise of this power, the tenure of office



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is dangerously brief, and the status of the official too insecure.

Several elements may in the future combine to stabilize this important profession: The growing tendency particularly in larger centers, to invest competent men with greater executive powers in school activities; the realization by communities of the desirability of continuous service by capable school officials; the recognition by superintendents themselves of the superior value of longer service in fewer communities. All these elements for strengthening the status of school superintendency should increase in effectiveness each year since they are of a business nature which time and experience should tend to develop as the permanent verities of successful school administration.

They will not develop so rapidly nor operate so successfully in smaller communities. For this reason, the Massachusetts legislation, which in the superintendency unions, has demanded certification of superintendents, and secured for them a minimum salary rate and a three year tenure of office, is an excellent example of administrative comprehension of field conditions in state education. This legislation has been a powerful agency in stabilizing the profession, and rendering it attractive to professional educators. These will bring to their work certain business capacities they must have if they are to succeed. With more stable conditions obtaining in the field of professional superintendency, the perspectives of superintendents will lengthen out proportionally, embracing a larger field of extensive effort and attempting to diagnose the future with greater confidence. When superintendents realize the need of their carefully surveying the entire educational field in order that they may grasp the trend and rate of progress of active educational re-adjustments, for utilization in their local fields of service as far as possible and at the same time practicable; when they have learned to translate this general progress into appropriate business language for the benefit of their local communities, and can talk this language in a concise and convincing manner before their school boards, then only

will the beginnings of better business methods, and of genuine comprehension of their larger functions in education be made.

Fifth. It has been shown by statistical research that in Massachusetts there has been a definite and measurable transfer of important degrees of administrative authority to school superintendents by their school boards. This accordingly places increased responsibility upon superintendents to bring about more rapidly the practical destruction of frictional operation and condition, since theirs is the requisite power if it be combined with ordinary intelligence and sound business ability, to originate and establish standards of official courtesy and workable business relations.

All the wise counsel, all the striking examples, all the helpful suggestions ever embodied in numerous works on educational administration will be of little avail to the superintendent who does not ceaselessly engage himself in the practical minutiae of plain every-day hard work, whether it be professional study, wise supervision, open and frank committee relations, or cosmopolitan activity in the community. He must be a capable businessman, a man of nerve, and a man of ideals. This is no Utopian dream. It is an American necessity in education.

One writer of wide outlook says in prophetic vein:¹⁸

"To engage in the work of education is to enlist in the nation's service. Its call is for those who would dedicate themselves in a noble way. Those who would serve must be of the world with red blood in their veins; they must know the world, its needs and its problems; they must have largeness of vision, and the courage to do and to dare; and they must train the youth with whom they come in contact for useful and efficient action."

From expert and lay sources of criticism of public school management as it is conceived to operate today we have had the opportunity to examine somewhat at length the changes against the directing and controlling officials of the system. These accusations are that there is too little business acumen shown in the manage-

¹⁸E. P. Cubberley; "Changing Conceptions of Education." Page 68.

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Sending the children to school in a *Studebaker* School Bus insures them not only a pleasant and comfortable ride, but a ride that is *healthful*. Because the *Studebaker* School Bus is so built that it can easily be kept in strictly sanitary condition.

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ment of a vast business enterprise with correspondingly large material and educational losses; ignorance of vitally important educational ends; confusion of functions and wasteful duplication of efforts on the part of higher administrative officials; frictional relations operating among these officials resulting in constant changes of important officials, with consequent slowing down of educational momentum.

We have also had the opportunity to discern the coming into active and beneficial force many practical corrective agencies which will eventually remove many causes of present criticism. Reorganization of school curricula, wider development of educational agencies, the recognition of scientific management of school activities by school boards as shown in the appointment of school business managers, supply agents, school architects, etc., all these are earnest attempts to answer the just criticisms hitherto meted out to school officials.

The betterment of the relations between school boards and their executive officials must of necessity be a matter of slower accomplishment. Constructive forces energized in the community and exercised by school boards and superintendents alike in their mutual tasks of educational direction are the hope we must wait for. We await wiser men of school boards, better executives as superintendents who will think more often of serving few communities well and long, rather than moving about often from place to place in response to the lure of novelty or slightly increased compensation. The increase of such a type of superintendent in school work will mark the increased definiteness of the status of the superintendent with corresponding gains in educational work in general. The problems of lay control of executive action are not

simple, but "The difficulties of democracy are the opportunities of education. Efficient public service is the mark of civilization."¹⁷

¹⁷Nicholas Murray Butler, "The Meaning of Education." P. 120.

SCHOOL ADMINISTRATION.

Pekin, Ill. The board has designated four rooms to be used one morning each week, during the months of July and August, for story telling. It is planned to have regular teachers assigned to the classes.

Steubenville, O. A six weeks' summer school for high school students has been opened.

Boston, Mass. Beginning September first, a rapid advancement class will be established in the Putnam District.

Muscatine, Ia. The board has ordered that medical attention be given injured or sick pupils at the school buildings. Each school has been equipped with an emergency medicine cabinet.

Merrill, Wis. A six weeks' summer school has been opened.

Battle Creek, Mich. A summer school has been established.

Bay City, Mich. A census of the school population completed recently shows that there are 13,542 children of school age, an increase of 404 over last year.

San Bernardino, Cal. A summer school has been opened for the benefit of pupils who have not been promoted.

Pittsburgh, Pa. According to Secretary George W. Gerwig, there are 88,993 pupils in the schools, of whom 48,222 are boys and 48,043 are girls. There are 133 buildings with a valuation of \$19,000,000 and a teaching corps of 2,662 persons.

The New Jersey State Board of Education has adopted a recommendation of the advisory committee, providing for a survey of the normal schools of the state.

Columbus, O. The board has created the offices of first assistant and second assistant superintendents, replacing the former supervisors of high and graded schools. Mr. C. H. Fullerton of the East High School has been appointed to the former, and Miss Marie Gule, high school supervisor, to the latter.

Peoria, Ill. The board has begun a survey of the public school system to determine the efficiency of the educational and business departments. The survey will be conducted in a friendly spirit and with the purpose of suggesting changes and improvements for the operation of the schools.

Youngstown, O. Upon the suggestion of Supt. N. H. Chaney, the board has adopted a seven and one-half hour day for the high school, beginning September first. The morning sessions will be from eight to twelve and the afternoon sessions from one to four-thirty. Teachers, in addition to six full consecutive hours of attendance and service, must supervise the study room and coach backward students during any class period. Teachers who have charge of athletic work after school hours may be released from class periods at noon, the hours of after school practice and Saturdays ranking as equivalent service.

Saginaw, Mich. A summer school will be conducted on the west side during the summer. Sessions will be from seven-thirty to eleven-thirty during the period from July 5th to August 11th. A course in penmanship will be offered in addition to the usual academic and trade subjects.

Bloomington, Ill. A summer school has been opened for the benefit of grade and high school students who wish to take up back work or to enter upon advanced subjects. The course will cover six weeks.

According to Secretary J. C. Griffith of Fort Worth, Tex., the financial management of the schools during the past year has been the best in the history of the school system. The indebtedness of the schools has been reduced from \$50,000 to \$6,000, making a total saving of nearly \$45,000 for the year. The income for the year is \$471,696 and the expenditures amounted to \$426,852.54.

Burlington, Ia. A summer school will be conducted from June 26th to August 4th, for the benefit of pupils who have failed, those who need extra training to strengthen them for the next year, and those of unusual ability who are able to make a grade in a summer course. To be eligible to the latter class, pupils must be recommended by the teacher and principal.

Subscribers' Free Service Department

We invite all our readers to ask questions of any kind on any problem of school administration, and we promise to answer them fully and promptly. If we must, we shall investigate specially, charging the trouble and expense to our editorial appropriation.

If you are interested in the purchase of any of the items listed below, or if you want catalogs for your files, do not hesitate to check this list and mail it to the address given below:

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"HOW CAN SCHOOL EXPENDITURES BE MINIMIZED WITHOUT IMPEDING PROGRESS?"

(Continued from Page 16)

the economical side of it has been recently recognized by the advocates of the junior high school.

It is a fact, generally borne out by school statistics, that approximately forty per cent of all high school enrollment is in the first year, or ninth grade. The rate of increase in high-school attendance is constantly accelerated, necessitating additional accommodation. The condition seems to make it imperative that school boards meet this additional burden in some more economical manner than the erection and equipment of separate high school buildings with their expensive appurtenances.

The city which I represent shows an increase in high-school attendance of one hundred and ten per cent in the last ten years. The increase in the last year has been two thousand pupils. To accommodate this number with a new building and high school equipment in keeping with present standards would require a charge against

the capital and outlay account of approximately a million dollars, thus creating an annual fixed charge of \$80,000 to meet the required bonded indebtedness. It goes without saying that this expenditure cannot be repeated many years without causing an increased tax levy to meet the carrying charges of the increasing indebtedness.

The Junior High School.

I am not an educational expert and therefore cannot speak of the educational worth of the junior high school; but from statistics taken from Philadelphia school records I am prepared to say that the difference between the cost per pupil in the seventh and eighth grades and the ninth grade is out of all proportion.

For illustration, in a comparative annual statement of expenditures in seventh and eighth and in ninth grades, prepared recently by Associate Superintendent Wheeler of the Philadelphia Public Schools, it is shown that the total cost per pupil in the seventh and eighth grades was \$43 and \$45 respectively, and in the ninth grade it was \$111 per pupil. Doubtless the cost of instructing pupils in the seventh and eighth

grades would increase if these pupils were put in a junior high school; but it is practically certain that this would be more than offset by the reduction in the cost of instructing ninth grade or first year high school pupils.

Of course, the figures here submitted may not be typical of other large cities; but I am quite sure that investigations would show that sufficient savings could be effected to overcome the objections of those who prefer the type of school organizations to which they have always been accustomed.

What better reason may be advanced for a change in the method of providing for high school accommodation?

In closing, I am mindful of the fact that whatever we may do, collectively or individually, in conserving the financial resources of our several boards of directors, we must keep step in the march of progress of our public schools. We must also have in mind the dollars-and-cents problem with which we, as secretaries, business agents, or directors, are constantly confronted.

Therefore, we should keep on our desks the ever-ready weapons of defence against assaults

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RECORD OF TEXT-BOOKS																												
IN THE _____ SCHOOL _____																												
SUBJECT _____																												
Year No.	TITLE	Unit	1915				1916				1917				1918				1919				1920				1921	
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	2234	Heart of Oak Series: Book 1 (Rev. Ed.)	100																									
	2235	2 (Rev. Ed.)	-																									
	2236	3 (Rev. Ed.)	-																									
	2237	4 (Rev. Ed.)	-																									
	2238	5 (Rev. Ed.)	-																									
	2239	6 (Rev. Ed.)	-																									
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insure school buildings as free from dust and dirt as your home. The Spencer swivel tool gets *all* the dust at one pass. Four men can do more cleaning with it than five with the old-fashioned, dust-scattering brooms.

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Installed in old buildings as well as in new ones.

We shall be pleased to mail interesting data to any member of a school board who will communicate with us.

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3 H. P.

on the school treasury, the pruning-knife or the blue pencil. We must use these weapons, however, with care and deliberation in dealing with the varied problems put up to the school board for the extension and elaboration of school systems that are now crowded to the doors with activities, the cost of some of which is at least doubtful as to being rightly charged against the school fund.

A SCHOOL COST ACCOUNTING SYSTEM.

(Concluded from Page 14)

all the schools of Michigan City. Before embarking on this project it was necessary to take an inventory, and this was done during the first six weeks of the school year, entirely by students of the commercial department. The inventory covers all items of school property with the exception of buildings and grounds.

After the completion of the inventory, the department drew up a system of stock record cards on which it is possible to carry each item of supplies handled in the schools. The storeroom for the entire school system is charged with all supplies purchased and all labor and bills contracted during the year. Whenever supplies are given out from the storeroom or labor is undertaken and completed the proper account is credited with these items and the proper entries are made on the stock cards.

In order to make this work as simple as possible in the record keeping, a set of blank requisitions has been drawn up so that for every article taken from the storeroom and every piece of work done, a requisition is made out by the principal of the building where these items are required, and filed with the commercial department. The Board has furnished the department with every invoice of goods bought and every bill for work or repairs done, and the students of the department have copied these invoices for their own files and have made the

proper distributions. This gives them valuable acquaintance with the various forms under which different firms invoice their accounts.

It is expected when this system is thoroly in operation and has had a chance to show what can be done, that the commercial department will be the gainers by having been brought into live touch with actual business conditions and the school will profit by knowing what the actual distribution of its running expenses for the year has been.

L. W. Keeler,

Superintendent of Schools.

HOBBIES: EXAMINATIONS—CREDITS—EXPERIENCE.

(Concluded from Page 18)

and reared on the premises, and sometimes even then it is not trusted.

It is an absurd but well known fact that a successful teacher of one city must often discount her services for several years when she changes location, not because her work is poor but just *because*.

I know of a young man who left a certain system to enter another business. After two years he wished to return and was obliged to begin again at a small salary and work up to the point where he left off. Now, if he was not equal to himself, why give him any place at all? Surely they know his ability, and it could have changed but little in two years.

I am not by any means an advocate of ingratitude for long years of faithful service, if it is efficient. But when time is the only consideration for a maximum salary, and real service is discounted, the Experience hobby becomes a ridiculous plaything in the hands of mature people who ought to have better sense.

If I were a school board member or a superintendent I would make a desperate attempt to

pay for real efficient service, and the best service would command the best salary, regardless of Examination, College degrees, or Experience. I would rather pension an old teacher and relieve her from active service than to set the bad example of paying a high price for poor work. And, if I had a superior teacher who "delivered the goods," and had not even a high school diploma, I would pay her in proportion to the value of her work.

PROGRESS IN SCHOOL ADMINISTRATION IN PORTLAND.

(Continued from Page 22)

story building, if possible. Grounds appreciate in value, but improvements deteriorate and grow obsolete. One-story buildings are cheaper and safer. Less expensive materials enter into the construction—that interests the taxpayers. Danger from panics and fire are minimized—that interests the parents.

Operating experts test fuel, lamps, heating plants and cleaning compounds and provide the janitors with individual instruction and systematic schooling. The operating expert is a modern institution. He would certainly have had much to do 25 years ago.

There were at one time, over forty buyers for the district. A supply room was maintained, carrying about fifty different items of school and janitor supplies. Delivery wagons were hired when large packages were hauled; otherwise, principals and janitors carried whatever they requisitioned. The store room now contains five thousand different items, covering nearly everything upon which there is steady call. These materials are for cooking and sewing, furniture, plumbing, electrical, building, janitor supplies and equipment and repairs. The selection is so carefully made that the en-



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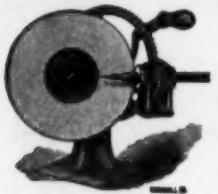
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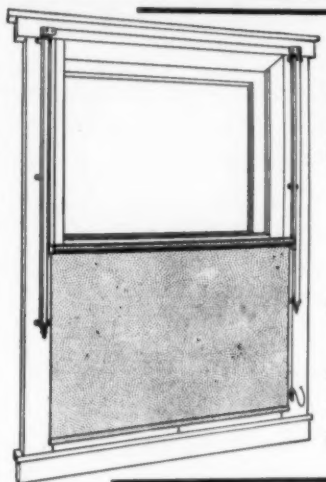
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Shop Early.

tire stock inventories less than \$15,000. Orders are not filled until they are approved by all proper authorities. The district maintains its own delivery truck, which visits each school once every four weeks under schedule, and is able to care for most emergency calls over an area of 72.93 square miles.

All records of the district now center in one place. Budgets and financial statements originate there. Banks pay as high as 4 per cent interest on deposits. Banks did not do this in Portland in 1891. Warrants are no longer issued. Bills are paid by check, and mailed to creditors in the same manner as payments are made in commercial houses.

Fire insurance is practically carried by the district, which already has about \$70,000 in bank subject to call. What used to be annual premiums are paid into an insurance account. Four years of this policy built up the fund. This sum of \$15,000 annually is saved for real needs and never goes into an expense account. It protects against loss by fire, and covers all school district liability premiums on automobiles, boiler insurance, and employes' insurance. The last mentioned is and will continue to be carried in old line companies, until the liability status of the school district is known thru litigation now before the courts.

Portland schools provide for a large number of non-residents, especially high school pupils, at a cost of about \$20,000 annually. The last legislature placed on the statute books, a high school tuition fund bill written up in my office. This opened up high schools all over the state, to every boy and girl in Oregon, and saved other high school districts proportionately much more than Portland. I am told that United States Commissioner of Education, P. P. Claxton, has pronounced this enactment the fairest and most practical of any law passed by any of the states in the interest of secondary education. State

Superintendent of Public Instruction of Oregon, J. A. Churchill, has stated that over three thousand Oregon students have been enabled to attend high school, who would never have been able to do so without this law. Now Portland, and every other standard high school district in the state, is paid tuition for her non-residents, by tax upon non-high school parts of counties from which these students come. Usually a careful study of conditions will reveal a way whereby education can be secured without the already tax laden city sustaining all the burden.

The foregoing represents some of the business problems solved by Portland schools within the memory of the SCHOOL BOARD JOURNAL. There are others to be solved, and it is confidently believed that when 25 more anniversaries have carved their tributes into the future, Portland will have solved some of them which will not benefit Portland alone, but will shed some light into the paths of others.

MECHANICAL EQUIPMENT OF SCHOOLS

(Continued from Page 24)

local service company, can generally secure a reduction in the rate charged for current, solely because of this far-sighted arrangement.

Second—A school so arranged can at any time install a plant if the power requirements increase or the local rates for current are raised.

Third—A school with boilers and piping, designed for power plant service, will have a much more serviceable equipment and a better heating installation at the most important point in the heating system, viz., where the heat is developed.

Schools, which have large power requirements and in which plants are installed, have found the following advantageous:

First—Current can be obtained in almost unlimited quantities with practically no additional expense.

Second—The buildings are entirely independent of outside trouble such as wires blown down, trouble at the central station, etc.

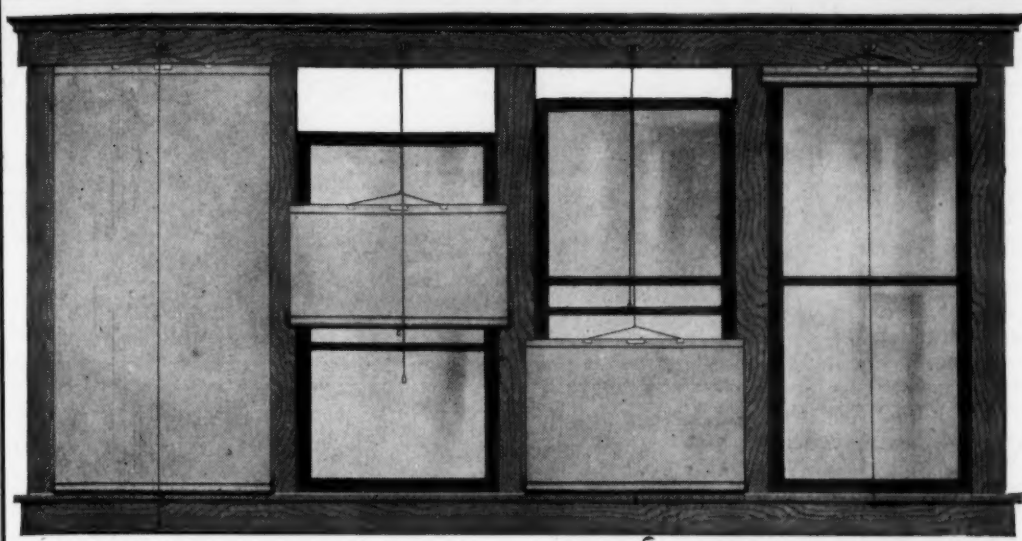
Third—No charges are incurred during summer closing.

Fourth—Current of any kind or quality can be generated whereas, with outside service, current (such as the local service company decides to furnish) must be accepted and used. Oftentimes such outside current is totally unsuited for school work.

Fifth—It is possible to have all the above advantages and still save money to a considerable extent, the exact amount depending on the local conditions.

It may be remarked that most of the current furnished by service companies is of the "alternating" variety which, while suitable for lights, is totally unsuited for school work where motors are directly connected to large ventilating fans and other apparatus is used requiring slow speed or variable control motors. Alternating current in fact is so undesirable that in many schools a motor-generator set is installed consisting of an alternating current motor operated by outside current. This motor drives a "direct current" generator which, in turn, supplies the school. While the result attained with such apparatus is the same as if direct current were furnished by the company it is not economical. Only about 90 per cent of the energy put in at one end of the machine comes out of the other and thus the power bill is increased by about 10 per cent for which no service is rendered.

The principal reason that electric companies continue to furnish alternating current is that this current can be raised to higher voltage and therefore can be transmitted on a smaller wire than direct current. The current thus meets most economically the requirement of the service company which is the transmission of cur-



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are guaranteed to give the maximum amount of service at a minimum cost. Once installed the Window Shade Problem is solved for all times. In making your purchases this year, be sure and specify **Draper's Window Shades**. Our new catalog will be of particular interest to you.


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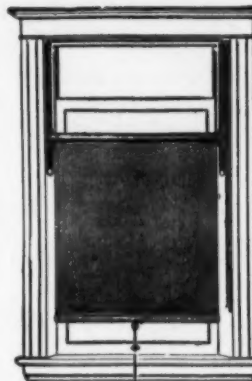
2 of the 15 Varieties

STEELE'S DUCK SHADES

Write for prices, catalog and free sample.



OLIVER C. STEELE MFG. CO., : SPICELAND, IND.



THE SIM-PULL SHADE REGULATOR

Practical—Effective—Inexpensive
Fits Any Shade or Window

"The only device of the kind now being sold and recommended by leading Window Shade and School Supply concerns."

Supplied in lengths of 15, 30 and 45 inches respectively

WHITCOMB & BOYCE, Mfgs.
1421 S. Trumbull Ave. CHICAGO, ILL.

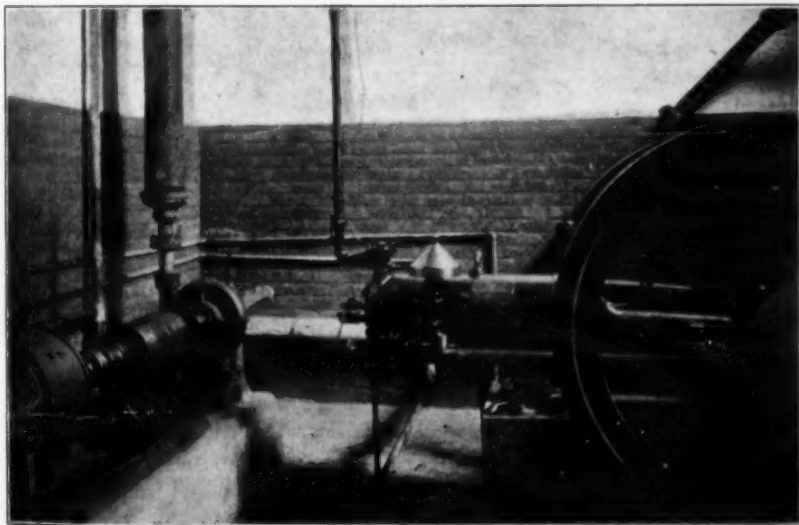


Fig. 130.

rent from the central station to the point of use with a minimum loss and least cost. The consumer, however, must take it as delivered regardless of the requirements at the consuming end of the line and of his own interests.

THE LINCOLN HIGH SCHOOL.

(Concluded from Page 29)

Boilers, Furnaces and Engine.....	8,807.65
Labor and Materials for Boiler House	11,987.67
Labor and Materials for Fan Room.	1,808.35
Labor and Materials for Air Ducts..	2,990.79
Kitchen Addition	3,099.37
Equipment and Furniture.....	25,159.08
Architects' Fees	22,848.65
Grading	2,562.03
Miscellaneous and Unpaid Expense.	27,631.80
Total	\$584,756.25
Site	25,150.00
Grand Total	\$609,906.25

SCHOOL BOARD NEWS.

Geneva, Ohio. The board has leased a plot of ground which will be devoted to school gardening purposes. The plot will be divided into sec-

tions, with three or four pupils to each section. The same kind of plants will be grown in each piece of ground. Prizes will be awarded to the groups having the best and largest yield of vegetables.

Cambridge, Mass. Two school gardens have been arranged for the pupils of the elementary schools. At one school a total of fifty children have undertaken the work of preparing the ground and planting the seeds.

Oakland, Cal. The board has adopted the so-called preferred list as its guide in the employment of new teachers. A large number of teachers from outside the city and a number of graduates from the University of California will be placed on the list of prospectives. The necessary instructors for the school year will be drawn from the eligible list at the discretion of Supt. A. C. Barker.

At the Bismarck School the attendance was 28,550, the highest recorded for any school. The Farragut School was second with 23,974 and the Clark School third with 22,120. The average attendance for an evening was 11,572.

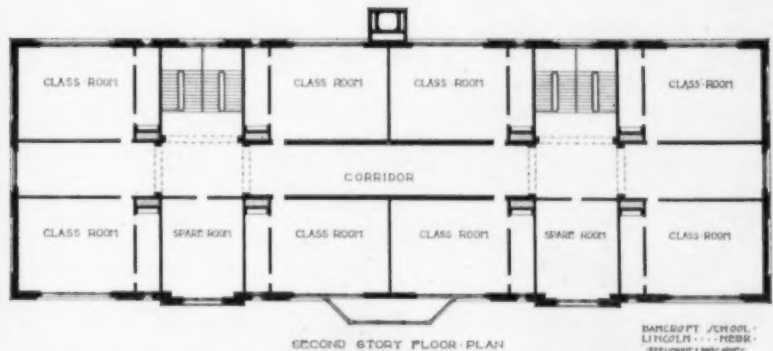
The Committees on Education and Corporate Stock Budget of the Board of Estimate, New York City, on May 16, presented a joint report on the matter of providing school accommodations. It is recommended that a duplicate plan of school organization be adopted to eliminate

part-time and double sessions, over-size classes, unsatisfactory schoolrooms and accommodations for expected growths in school population. It is requested that \$5,900,239 be appropriated to cover the cost of alterations, new sites, or additions to existing sites, new buildings, and additions to old buildings. Of the total appropriations, \$794,017 are for additions to high schools and the remainder for the reconstruction and extension of existing elementary school plants.

Wichita, Kans. The board is considering the adoption of a policy providing for a unit plan of building for all future structures. It is the opinion of the members that the detached units can be constructed more cheaply than an ordinary ward school; that the buildings are easily provided with a maximum of light and ventilation, and that the plan offers adequate playground space in the center of the building site.

Saginaw, Mich. Automatic savings banks have been established in five schools. The present banks are an extension of the system invented and installed by R. T. Hosking of Saginaw.

The annual spelling contest of the sixth grades of Augusta, Me., was held during the week of May 27th. The written contest, which consisted of one hundred words, was given to each pupil in the sixth grade. The prize, which is a framed picture selected by the pupils, is hung in the room of the winning school.



Second Floor Plan of the Bancroft Prevocational and Junior High School, Lincoln, Neb.
Messrs. Berlinghof & Davis, Architects, Lincoln.
(For illustrations and text see page 30.)

ANNOUNCEMENT



THE EAGLE PENCIL COMPANY

announces the removal of its offices and show rooms to their new building
703 East 13th St., New York

For convenience of the trade a show room has also been established
at the VICTORIA BUILDING, 27th St., Broadway and Fifth Ave.

PANAMA-PACIFIC EXPOSITION AWARDED

EBERHARD FABER

Grand Prize and Two Gold Medals for

Lead Pencils, Penholders, Erasers and Rubber Bands



The Splendid Lead in This Pencil
Makes for Economy and Efficiency

EBERHARD FABER, New York

No. 293
"Fine Writing"
Round.
Green Polish,
Grades
1, 2, 3, 4

Humiliating.

The professor was given a banner to carry, but in spite of the entreaties of the marshal, refused to open it, but marched the entire distance with it furled. When he got home his wife accosted him:

"John," said she, "why on earth didn't you unfurl your banner?"

"Had you seen what it said on that banner?" retorted John.

She admitted she hadn't.

"Well, this was the inscription: 'Men can vote. Why can't I?'"

They All Do.

When he finished his freshman year he thought that he would begin as far down on the commercial ladder as first vice-president, for he knew that by hard work and application he could fight his way to the topmost rung.

When his sophomore year was over he believed that it would be really the best for him to go in as Western field-manager. A taste of the West would do him good, anyhow.

When he had completed the junior year he decided that he would be content to accept the position of chief clerk, as a future president should know all the details of his business.

When his degree was given him he went out and applied for a job, just as anybody else would.
—Puck.

NIL DESPERANDUM.

(Shakespearean Sonnet of a Sweet Girl Graduate.)

BY MAY AYRES.

Here on the threshold of the world I stand
Dazed by the vision of my future life,
When, yielding to Necessity's command,
I too must join the never ending strife.
Before me lies each weary, weary year,
Youth slowly changing into middle age,
My home an alien room, devoid of cheer,
My only thought—to earn a living wage.
Day after day in unremitting toil
Still shall I labor on, my dying groan,
Drowned in the heartless city's loud turmoil—
I shall expire unfriended and alone.
Yet—stay! Before Death comes, the grim
destroyer,

Who knows but I may—marry my employer!

A Youthful Cynic.

Teacher—Now, children, what is it we want most in the world to make us perfectly happy?

Bright Youngster—The things we ain't got.

A Well-Learned Lesson.

"Well, Willie," said father as the precocious offspring returned from his first day at school, "what did you learn at school today?"

"Lots o' things," answered Willie proudly. "I learned always to say, 'Yes, sir' and 'No, sir' and 'Yes, ma'am' and 'No, ma'am'."

"Oh, you did?"

"Yep."

A — You told me Jones had become an educator.

B—Not at all. I said he had taken a school.

An exchange prints the following list of words ending in "ough," and adds the pronunciation of the more obscure words, so far as ascertainable from the dictionaries: Messrs. Gough (goff), Hough (huff), and Clough (cluff), tho tough enough, thought thru the day that they would visit Mr. Brough (broo), who, having a hiccough (hiccup) and a cough, lived in a clough (cluff or clou), with plenty of dough, and a tame chough (chuff) kept near a plough in a rough trough, hung to a bough over a lough (loch). A slough (s'luf) of the bank into the slough (sloo) injured his thoroughbred's hough (hock).

No wonder the foreigner shudders at those four terrible letters!

Overproduction.

Emanuel Geibel, a German lyric poet of the nineteenth century, wrote delightful verses. For some of his youthful readers, however, his poems had no charm. One boy voiced his own and his mates' grievance in a letter to the poet that *Das Buch für Alle* reprints:

To Herr Emanuel Geibel, Lübeck, February 11, 1882. Honored Herr Geibel. We finished learning your poem, "The Hope of Spring," today. A week ago five boys had to stay after school because they hadn't learned it, and today two got something with the rod because they still didn't know it. I suppose you didn't think of that when you wrote the poem. And you are one of the shorter poets, too. Schiller is the longest, but then we don't get him until the first grade. Our teacher says that your poem is very pretty; but there are so many pretty poems, and we have to learn them all. Please don't write any more poems!

The Limit in Politeness.

A certain professor is unusually courteous, both in and out of the classroom. One day he made a bonfire, says the New York Sun, in his back garden. The flames, creeping rapidly thru the dry stubble, frightened him, and he believed his house was in imminent danger. So he ran wildly down the street, crying at the top of his voice:

"Help! Fire! Fire! Help!"

And then, as if thinking himself too abrupt and urgent, he politely added, so his neighbors say:

"That is, all those who can conveniently do so."

Just Like a Boy.

"Bobby," inquired the mother, "did you wash your face before the music teacher came?"

"Yes'm."

"And your hands?"

"Yes'm."

"And your ears?"

"Well, ma," said Bobby, judiciously, "I washed the one that would be next to her."

As Others See Us.

Teacher—"Well, Jimmy, what is a witch?"

Jimmy—"A witch is like a real old maid what ain't got no husband."

Teacher—"Why Jimmy," and Miss Gray assumed a coquettish air, "do you think I am a witch?"

Jimmy (excitedly and apologetically)—"Oh! no, ma'am; you're more like a fairy grandmother."—*Cincinnati School Index.*

He Won't Go Out Any More.

Rough—I understand Blink flunked out.

Fusser (in agony)—What shall I do! What shall I do!

Rough—Here, don't take it so hard.

Fusser—But he was the only fellow I knew with a dress suit.

Practical Idealist.

Teacher: Now, Charles, what beautiful phenomenon is to be seen frequently when the sun shines while it rains?

Charles: Umbrellas.—*Fliegende Blaetter.*



A Superintendent's Wife.

Professor Jones—I haven't seen your husband at the summer meetings of the N. E. A. in late years, Mrs. White.

Mrs. White—No, he spends his vacations at home and enjoys the summer in his own way, as I want him to.

Educational Trade Directory

The names given below are those of the leading and most reliable Manufacturers, Publishers and Dealers in the United States. None other can receive a place in this Directory. Everything required in or about a schoolhouse may be secured promptly and at the lowest market price by ordering from these Firms

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Oliver C. Steele Mfg. Co.
L. O. Draper Shade Co.
Frampton Window Shade Co.
The Aeroshade Company.
Suprema Shading Works.
Caxton School Supply Co.

AIR SCHOOL FURNITURE.
Empire Seating Co.
Langslow, Fowler Co.

ART MATERIALS.

Binney & Smith.
Eagle Pencil Co.
American Crayon Co.
Devos & Reynolds.
Thos. Charles Co.

ATHLETIC FIELD APPARATUS.

Fred Medart Mfg. Co.
W. S. Tothill.

AUDITORIUM SEATING.

Haney School Furniture Co.
Peabody School Furniture Co.
American Seating Co.
Peter & Volz Co.
Steel Furniture Co.
N. J. School & Church Furn. Co.
Heywood Bros. & Wakefield Co.
Empire Seating Co.

BLACKBOARDS-COMPOSITION.

N. Y. Silicate Book Slate Co.
American Seating Co.
Beaver Board Companies.
Caxton School Supply Co.

BLACKBOARDS-NATURAL SLATE.

Keenan Structural Slate Co.
Penna. Struct. Slate Co.
Albion Bangor Slate Co.
Crown Slate Co.
Excelor Slate Co.
Granville Hahn.
Jackson Bangor Slate Co.
E. J. Johnson.
Lehigh Slate Mfg. Co.
North Bangor Slate Co.
Parsons Bros. Slate Co.
Phoenix Slate Co.
M. L. Tinsman & Co.
Thomas Zellner.

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Peckham, Little & Co.

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A. Flanagan Co.
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Funk & Wagnalls Co.
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National Crayon Co.
American Crayon Co.
E. W. A. Rowles.
Peckham, Little & Co.
Peter & Volz.
Associated Mfrs. Co.
A. Flanagan Co.

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Samuel Cabot.

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American Sanitary Products Co.
Associated Mfrs. Co.
Theo. B. Robertson Products Co.
Central City Chemical Co.

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Grand Rapids School Equip. Co.
E. H. Sheldon & Co.
Kewanee Mfg. Co.
Economy Drawing Table Co.
C. Christiansen.
Leonard Peterson & Co.

DOOR CHECKS.

Norton Door Check Co.

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E. H. Sheldon & Co.
Economy Drawing Table Co.
C. Christiansen.

DRAWING MATERIAL.

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DRINKING FOUNTAINS.
L. Wolff Mfg. Co.
Jas. B. Clow & Sons.
N. O. Nelson Mfg. Co.
Rundle-Spence Mfg. Co.
Glauber Brass Mfg. Co.
D. A. Ebinger San. Mfg. Co.
Ingberg Sanitary Supply Co.

ERASERS.

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Caxton School Supply Co.

ERASER CLEANERS.

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Wisconsin Electric Co.

FILING CABINETS.

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FIRE ALARM SYSTEMS.

Holtzer-Cabot Electric Co.
Stand. Electric Time Co.

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Dow Wire & Iron Works.
Minnesota Manufacturers Assn.

FIRE EXIT DEVICES.

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Sargent & Co.

FIRE EXIT LATCHES.

Vonnegut Hdw. Co.

FIRE EXTINGUISHERS.

Samuel Lewis.

FIRE PROOF DOORS.

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FLAGS.

The Chicago Flag & Decorat. Co.

FLOOR BRUSHES.

Milwaukee Dustless Brush Co.
Spring Handle Co.
John L. Whiting-J. J. Adams Co.

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Samuel Cabot.

FORGES.

Oliver Machinery Co.
Grand Rapids School Equip. Co.

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Central City Chemical Co.

FURNITURE.

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Haney School Furniture Co.
Peter & Volz Co.
Steel Furniture Co.
N. J. School & Church Furn. Co.
Heywood Bros. & Wakefield Co.
Columbia School Supply Co.
Empire Seating Co.
Superior Seating Co.
Educational Equipment Co.
Langslow, Fowler Co.

GAS MACHINES.

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Tirrill Gas Machine Co.

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INK-DRY.

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Bayless Sons Co.
A. Flanagan Co.

INK WELLS.

U. S. Inkwell Co.
The Tannewitz Works.
American Seating Co.
Squires Inkwell Co.
Sengbusch Self-Closing Inkstand Co.

JANITORS' SUPPLIES.

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A. Flanagan Co.

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Thos. Charles Co.

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LABORATORY FURNITURE.

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C. Christiansen.
Tannewitz Works.
Amer. Wood Work. Mach. Co.
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LIBRARY SHELVING.

Durand Steel Locker Co.

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American Sanitary Products Co.

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Durand Steel Locker Co.
Federal Steel Fixture Co.
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